AD- CLARENDON COUNTY INVITATION FOR BID

PROTECTIVE CLOTHING AND GEAR FOR STRUCTURAL FIREFIGHTING

Clarendon County is accepting sealed bids for **PROTECTIVE CLOTHING AND GEAR FOR STRUCTURAL FIREFIGHTING** for the Clarendon County Fire Department. This project is funded in part by the U.S. Department Homeland Security/FEMA.

The purpose of this invitation is to promote competition. Specifications are not intended to be restrictive, in instances should brand specificity be used to establish minimum requirements; consideration will be given to “or equal” product. All products must meet or requirements of NFPA 1971 (current edition). Clarendon County will require that all bids meet minimum specifications and will be evaluated on an equal competitive basis.

**OWNER’S RIGHTS:** This solicitation does not commit Clarendon County to award a contract, to pay any cost incurred in the preparation of bids or to procure or contract for goods or services. Clarendon County is an equal opportunity employer.

Clarendon County reserves the right to accept or reject any, all or any part of BIDS received as a result of this request, to make multiple awards, waive any informalities or to cancel in part or in its entirety this request, if it is in its best interest to do so. Clarendon County will be sole judge as to whether BIDS meet all requirements.

**DEADLINE TO SUBMIT:** Sealed BIDS must be received by **2:00 P.M., local time,** April 7, 2014

**BID PACKAGES:** *Must be requested in writing, via fax, mail or e-mail (preferred) to:* Tamika Malone, Procurement Director procurement@clarendoncountygov.org
Clarendon County Procurement
411 Sunset Drive, Room 603
Manning, SC 29102
PHONE (803) 433-2452 FAX (803) 433-4002
**DESCRIPTION:** PROTECTIVE CLOTHING AND GEAR FOR STRUCTURAL FIREFIGHTING

******INSTURCTIONS ******

Please submit ONE (1) COPY OF THIS PAGE COMPLETED AND SIGNED *BID SUBMITTAL FORM* and include PAGES 10-27 in same sealed envelope.
Please show **620-PROTECTIVE CLOTHING AND GEAR FOR STRUCTURAL FIREFIGHTING** on envelope. Clarendon County assumes no responsibility for unmarked or improperly marked envelopes.

<table>
<thead>
<tr>
<th>Mailing Address &amp; Physical Location:</th>
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<tbody>
<tr>
<td>CLARENDON COUNTY PROCUREMENT DEPARTMENT</td>
</tr>
<tr>
<td>411 SUNSET DRIVE ROOM 603</td>
</tr>
<tr>
<td>MANNING, SC 29102 E-MAIL  <a href="mailto:procurement@clarendoncountygov.org">procurement@clarendoncountygov.org</a></td>
</tr>
<tr>
<td>PHONE (803) 433-3240  FAX (803) 433-4002</td>
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| Award & Mendsments The award, this solicitation, and any amendments will be posted on the Clarendon County website  [http://www.clarendoncounty.sc.gov](http://www.clarendoncounty.sc.gov) |

You must submit a signed copy of this form with your proposal. My signature indicates my agreement to be bound to the terms and conditions contained herein. My signature also indicates familiarity with DHEC requirements provided in Section IV of this solicitation.

<table>
<thead>
<tr>
<th>Name of Offeror</th>
<th>(Full legal name of business submitting the offer)</th>
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<tbody>
<tr>
<td>Authorized Signature</td>
<td>(My signature indicates that I am authorized to submit a binding offer to enter contract on behalf of Offeror named above.)</td>
</tr>
<tr>
<td>Title</td>
<td>(Business title of person signing above)</td>
</tr>
<tr>
<td>Printed Name</td>
<td>(Printed name of person signing above)</td>
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<tr>
<td>Date</td>
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Instructions regarding Offeror's name: Any award issued will be issued to, and the contract will be formed with, the entity identified as the offeror above. An offer may be submitted by only one legal entity. The entity named as the offeror must be a single and distinct legal entity. Do not use the name of a branch office or a division of a larger entity if the branch or division is not a separate legal entity, i.e., a separate corporation, partnership, sole proprietorship, etc.

<table>
<thead>
<tr>
<th>Offeror’s Address</th>
<th>City/State</th>
<th>Zip Code</th>
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<tbody>
<tr>
<td>Phone</td>
<td>Fax</td>
<td>E-mail</td>
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I hereby certify that **BID PRICE BELOW** fully meets all terms, conditions and requirements as specified herein.

<table>
<thead>
<tr>
<th>1. COAT &amp; PANTS</th>
<th>BID PRICE $</th>
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<tr>
<td>2. BOOTS PER PAIR</td>
<td>BID PRICE $</td>
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<tr>
<td>3. GLOVES PER PAIR</td>
<td>BID PRICE $</td>
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<tr>
<td>4. HELMETS EACH</td>
<td>BID PRICE $</td>
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**Accepted By:**

TAMIKA MALONE, PROCUREMENT DIRECTOR

**Date**
SECTION I: GENERAL INFORMATION

The purpose of this INVITATION FOR BID is to establish a source or sources for the purchase of a PROTECTIVE CLOTHING AND GEAR FOR STRUCTURAL FIREFIGHTING for the Clarendon County Fire and Rescue Department. Clarendon County anticipates ordering an approximate quantity of 20 sets per year; however, this quantity is estimated only; not definitive or guaranteed and will fluctuate each year. The County intends to award a contract for a period of one (1) year intervals, with the option to renew for up to four (4) additional years; for an undetermined quantity. Successful offeror(s) shall guarantee no more than a 5% price increase per year. The County reserves the right to use multiple vendors if it is in the best interest of the County to do so.

ADDENDUMS: All Addendums to and interpretations of this solicitation shall be in writing from the Procurement Director, Clarendon County. Any errors or omissions requiring correction shall be brought to the Procurement Director's attention immediately. The Procurement Director shall not be legally bound by any Addendum or interpretation that is not in writing. Bids, Addendums or withdrawal request must be received by the BID deadline date. It is the offeror's sole responsibility to ensure that these documents are received by the Procurement Director (or office) any time prior to the advertised deadline. No BID may be withdrawn after that time.

BOND SURETY: A Bid Bond in the amount of 5% of Bid must be submitted with your Bid.

COMPETITION: This solicitation is intended to promote competition. If the language, specifications, terms and conditions, or any combination thereof restricts or limits the requirements in this solicitation to a single source, it shall be the responsibility of the interested offerer to notify the Procurement Director in writing so as to be received five (5) days prior to opening date. Each offeror shall fully acquaint himself with conditions relating to the scope and restrictions attending the execution of the work under the conditions of this solicitation. The failure or omission of an offeror to acquaint himself with existing conditions shall in no way relieve him of any obligation with respect to this proposal or to the contract.

All bids must be complete and carefully worded and must convey all of the information requested in order to be considered responsive. If the bid fails to conform to the essential requirements of this IFB, Clarendon County and Clarendon County alone will be the judge as to whether that variance is significant enough to consider the bid non-responsive and therefore not considered for award. All bids shall become the property of Clarendon County upon submission. Clarendon County reserves the right to negotiate final price subsequent to the submission of qualified bids.

Unless stated otherwise herein, the basic and governing language of the contract resulting from this solicitation shall be comprised of the IFB documents, including any attachments and amendments, and the successful offeror's signed bid. In the event of a conflict between the two documents, the IFB shall govern. Should any disputes regarding compensation of any kind arise, which cannot be handled within the County Administration office, shall be heard in front of a judge in Clarendon County, South Carolina.
CONTRACT ADMINISTRATION: Questions or problems arising after award of this contract shall be directed to the Clarendon County Procurement Office, 411 Sunset Drive, Room 603, Manning, SC 29102.

CORRECTION OF ERRORS ON INVITATION TO BID FORM: All prices and notations should be printed in ink or typewritten. Errors should be crossed out, corrections entered and initialed by the person signing the proposal. Erasures or use of typewriter correction fluid may be cause for rejection. No proposal shall be altered or amended after specified time for reviewing.

DEFAULT: In case of default by the contractor, Clarendon County reserves the right to purchase any or all services in default in the open market, charging the contractor with any additional costs. The defaulting contractor shall not be considered a responsible bidder until the assessed charge has been satisfied. Compliance with Laws. Contractor agrees to comply with any applicable federal, state and local laws and regulations. Termination--Breach. Should Contractor fail to fulfill in a timely and proper manner its obligations under this contract or if it should violate any of the terms of this contract, Clarendon County shall have the right to immediately terminate the contract. Such termination shall not relieve Contractor of any liability to Clarendon County for damages sustained by virtue of any breach by Contractor. Termination--Funding. Should funding for this contract be discontinued, Clarendon County shall have the right to terminate the contract immediately upon written notice to Contractor. Termination--Notice. Clarendon County may terminate this contract at any time upon written notice to Contractor. Warranty and Responsibilities. Any failure of Contractor to provide goods or services or otherwise perform pursuant to this contract, including without limitation, interruption or delay, that is due to failure of any services, individually or in combination, to successfully transition and/or to provide correct results as set forth in this document, shall not be force majeure, and shall be a breach of this contract. This applies to any failure of Contractor to perform and/or subcontractors that are due to perform any services, individually or in combination.

DISPUTES: The laws of South Carolina shall govern this Agreement. All litigation arising under said Agreement shall be litigated only in a nonjury hearing in the Circuit Court within the Third Judicial Circuit of Clarendon County, South Carolina. Upon approval of the Circuit Court, any such action shall be referred to the Master-in-Equity for Clarendon County. The prevailing party shall be entitled to recover attorney's fees and the costs of said litigation.

EQUAL OPPORTUNITY: Contractor is referred to and shall comply with all applicable provisions, if any, of Title 41, Part 60 of the Code of Federal Regulations, including but not limited to Sections 60-1.4, 60-4.2, 60-4.3, 60-250.5(a), and 60-741.5(a), which are hereby incorporated by reference.

FALSE CLAIMS: According to the S.C. Code of Laws § 16-13-240, "a person who by false pretense or representation obtains the signature of a person to a written instrument or obtains from another person any chattel, money, valuable security, or other property, real or personal, with intent to cheat and defraud a person of that property is guilty" of a crime.

FIXED PRICING REQUIRED: Any pricing provided by contractor shall be fixed. This clause does not prohibit contractor from offering lower pricing after award. Do not include taxes in your price.

INDEMNIFICATION: Any term or condition is void to the extent it requires the County to indemnify anyone.
NON-APPROPRIATIONS: Any contract entered into by Clarendon County or its departments, institutions, agencies, political subdivisions or other entities resulting from this bid invitation shall be subject to cancellation without damages or further obligation when funds are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal period or appropriated year.

PAYMENT TERMS: Payment will be made within thirty (30) days of acceptance of the completed order.

PROTECTION OF HUMAN HEALTH & THE ENVIRONMENT: The County of Clarendon requires all contractual activities to be in compliance with local, state, and federal mandates concerning “Protection of Human Health and Environment”. Any contractor doing business with the County will be required to document compliance and to specify prudent practices used by the contractor to address applicable mandates including, but not restricted to “The Hazard Communication Standard” OSHA CFR 1910.1200 (srr article 1,71-1910.1200). By submission of this proposal, the vendor agrees to take all necessary steps to insure compliance with these requirements.

PROTESTS: Any prospective bidder, offeror, contractor, or subcontractor who is aggrieved in connection with the solicitation of a contract shall protest in writing to the Procurement Director within (10) calendar days of the date of issuance of the applicable solicitation document. Any actual bidder, offeror, contractor, or subcontractor who is aggrieved in connection with the intended award or award of a contract shall protest within ten days of the date notification of award is posted. A protest shall be in writing, shall set forth the grounds of the protest and the relief requested with enough particularity to give notice of the issues to be decided, and must be received by the Procurement Director within the time provided.

PUBLICITY: Contractor shall not publish any comments or quotes by Clarendon County employees, or include the County in either news releases or a published list of customers, without the prior written approval of the Procurement Director.

PROTECTION OF HUMAN HEALTH & THE ENVIRONMENT: Clarendon County requires all contractual activities to be in compliance with local, state, and federal mandates concerning “Protection of Human Health and Environment”. Any contractor doing business with the County will be required to document compliance and to specify prudent practices used by the contractor to address applicable mandates including, but not restricted to “The Hazard Communication Standard” OSHA CFR 1910.1200 (srr article 1,71-1910.1200). By submission of this proposal, the vendor agrees to take all necessary steps to insure compliance with these requirements.

QUALITY OF PRODUCT: Unless otherwise indicated in this bid it is understood and agreed that any item offered or shipped on this bid shall be new and in first class condition, that all containers shall be new and suitable for storage or shipment, and that prices include standard commercial packaging. If items that are other than new (i.e. remanufactured or refurbished) are desired to be bid, the bidder must obtain written permission to bid such items at least 5 days in advance of bid opening from the person to whom inquiries are to be directed as listed on the front page of this invitation for bid.
REJECTION/CANCELLATION: Clarendon reserves the right to accept or reject any, all or any part of the statements received as a result of this request, or to cancel in part or in its entirety this request if it is in the best interest of the County to do so. Clarendon County will be sole judge as to whether statements submitted meet all requirements contained in this solicitation. Clarendon County will not be responsible for any cost incurred in the preparation of qualification statements. All statements shall become the property of Clarendon County upon submission.

QUALITY OF PRODUCT: Unless otherwise indicated in this bid it is understood and agreed that any item offered or shipped on this bid shall be new and in first class condition, that all containers shall be new and suitable for storage or shipment, and that prices include standard commercial packaging. If items that are other than new (i.e. remanufactured or refurbished) are desired to be bid, the bidder must obtain written permission to bid such items at least 5 days in advance of bid opening from the person to whom inquiries are to be directed as listed on the front page of this invitation for bid.

SECTION II: SPECIAL CONDITIONS

The CLARENDON COUNTY FIRE DEPARTMENT is very serious about the quality and service of our protective clothing. The successful bidder is expected to maintain or exceed industry expected high standards in safety, comfort, and wear life equal to or greater than the protection we have received in the past. Our overall objective is to offer our fire fighters the most thermal protection, greatest breathability, lightest weight, highest quality, highest level of mobility, and functional design available in the market today.

The CLARENDON COUNTY FIRE DEPARTMENT chooses to exercise its Legal Right to Specify as determined by the U.S. Supreme Court’s affirmation of the decision handed down in the case of Whitten Corp. vs. Paddock, by the U.S. District Court of Massachusetts, the First Federal District Court. That as trained professionals, CLARENDON COUNTY FIRE DEPARTMENT representatives are making informed judgments about products that they feel best serve their needs.

CLARENDON COUNTY desires that structural fire fighting protective clothing meets or exceeds the specifications contained herein. Successful offeror(s) will be expected to maintain or exceed industry standards in safety, comfort, and wear life equal to or greater than the protection we have received in the past. Our overall objective is to offer our fire fighters the most thermal protection, greatest breathability, lightest weight, highest quality, highest level of mobility, and functional design available in the market today. Specifications contained herein are a result of much testing and evaluation and are intended to serve in the best interest of our fire fighter’s needs.

EXCEPTIONS TO THESE SPECIFICATIONS: Minimum specifications for this equipment are included. In all cases equipment must be furnished as requested, unless noted otherwise, where brand names are used, consider the term “or equal” to follow. Written approval for any proposed substitution must be obtained. Requests for approved equals and/or clarification of specifications must be received in writing by the Clarendon County Procurement Director not less that 10 days prior to the date of scheduled bid opening. All requests for approved equal must be fully supported with technical data, test results, or other pertinent information and evidence that the substitute being offered is equal to or exceeds the specifications contained herein.
SECTION III: REQUIREMENTS FOR SUBMITTAL:

1. All bidders must include with their bid, the most current illustrated catalog data sheets with manufacturer’s printed specifications covering the specifications in this bid request. The material should be sufficiently detailed to permit the county to properly evaluate the bid. If for any reason the manufacturer’s literature does not cover, or is not detailed enough to identify all features/options shown in the specifications, a letter will be required with your bid stating that those items are included, and that the products offered meets the specifications.

2. Deliveries shall be FOB destination, freight prepaid. It is agreed by the parties hereto that delivery by the provider to a common carrier does not constitute delivery to the County. Any claim for loss or damage shall be between the contractor and the carriers.

3. Any deviation from specifications indicated herein must be clearly pointed out; otherwise, it will be considered that items offered are in strict compliance with these specifications, and successful bidder will be held responsible therefore. Deviations must be explained in detail on separate attached sheet(s).

4. Clarendon County desires that successful offeror(s) is a full service vendor/manufacturer with the capability to produce and make available any upgrades in technology as available, for protective clothing such as wildland gear, search & rescue or EMS garments. Full descriptive literature of these specialized garments shall be furnished with the sample gear.

5. Minimum specifications for this equipment are included. In all cases equipment must be furnished as requested, unless noted otherwise, where brand names are used, consider the term “equal” to follow. However, written approval for any proposed substitution must be obtained by the bidder prior to the close of bids. Requests for approved equals and / or clarification of specifications must be received in writing, by the PROCUREMENT DIRECTOR, requests for approved equal must be fully supported with technical data, test results, or other pertinent information and evidence that the substitute offered is equal to, or better than the specification requirement.

6. Changes to specifications will be made by written addendum. Prospective bidders may make appointments to discuss these specifications. This, however, does not relieve prospective bidders from the written requests for certification or equals approval.

7. Bidders failure to request approved equals, etc, will be interpreted as the bidders intent to comply fully with the requirements as written. Conditional or qualified bids shall be subject to rejection in whole or in part.

8. Blanket exceptions will not be accepted. Each exception must be clearly identified and explained. The fire department / clothing safety and selection committee will have the final authority in accepting or rejecting any exceptions taken.

9. Bidders failure to request approved equals, etc, will be interpreted as the bidders intent to comply fully with the specifications contained herein. Conditional or qualified bids shall be subject to rejection in whole or in part.
10. Blanket exceptions will not be accepted. Each exception must be clearly identified and explained. The fire department / clothing safety and selection committee will have the final authority in accepting or rejecting any exceptions taken.

11. Clarendon County reserves the right to award bids for each component of the Structural Firefighting ensemble separately or in whole (with the exception of the coat/pant ensemble, which shall be purchased from the same manufacturer).
OFFEROR'S CHECKLIST

AVOID COMMON SUBMITTAL MISTAKES

Review this checklist prior to submitting your bid/proposal. If you fail to follow this checklist, you risk having your bid/proposal rejected.

- **DO NOT INCLUDE ANY OF YOUR STANDARD CONTRACT FORMS OR PREFERRED CONTRACT CLAUSES.**

- **REREAD YOUR ENTIRE OFFER TO ENSURE EXCEPTION TO ANY OF THE MANDATORY REQUIREMENTS.**

- **MAKE SURE YOU HAVE PROPERLY MARKED ALL PROTECTED, CONFIDENTIAL, OR TRADE SECRET INFORMATION IN ACCORDANCE WITH THE INSTRUCTIONS ENTITLED: SUBMITTING CONFIDENTIAL INFORMATION. **DO NOT MARK YOUR ENTIRE BID/PROPOSAL AS CONFIDENTIAL, TRADE SECRET, OR PROTECTED! **DO NOT INCLUDE A LEGEND ON THE COVER STATING THAT YOUR ENTIRE RESPONSE IS NOT TO BE RELEASED!**

- **HAVE YOU PROPERLY ACKNOWLEDGED ALL AMENDMENTS? (SEE PAGE 2)**

- **MAKE SURE YOUR SUBMITTAL INCLUDES A COPY OF THE SOLICITATION COVER PAGE. MAKE SURE THE COVER PAGE IS SIGNED BY A PERSON THAT IS AUTHORIZED TO CONTRACTUALLY BIND YOUR BUSINESS.**

- **MAKE SURE YOU INCLUDE THE NUMBER OF COPIES REQUESTED OR SURETY BONDS.**

- **CHECK TO ENSURE YOU INCLUDE EVERYTHING REQUESTED!**

- **IF YOU HAVE CONCERNS ABOUT THE SOLICITATION, DO NOT RAISE THOSE CONCERNS IN YOUR RESPONSE! AFTER OPENING, IT IS TOO LATE! PLEASE RAISE YOUR QUESTION(S) IN WRITING TO THE PROCUREMENT DIRECTOR.**
SECTIONS: IV: (PAGES 10-27)

SPECIFICATIONS FOR STRUCTURAL FIREFIGHTING CLOTHING

INTRODUCTION: The CLARENDON COUNTY FIRE DEPARTMENT is very serious about the quality and service of our protective clothing. The successful bidder is expected to maintain or exceed industry expected high standards in safety, comfort, and wear life equal to or greater than the protection we have received in the past. Our overall objective is to offer our fire fighters the most thermal protection, greatest breathability, lightest weight, highest quality, highest level of mobility, and functional design available in the market today.

These specifications are a result of much testing and evaluation and are intended to serve in the best interest of our fire fighter’s needs.

COAT AND PANTS EMBLE

2.1 PURPOSE AND SCOPE: This specification is intended to define the minimum requirements for bunker clothing for fire fighters. In the absence of comment on particular points; industry standard practice should be presumed to prevail. Workmanship and material to be first quality throughout. Any exceptions to specifications must be clearly spelled out at time of bid. In the absence of comment on a specific point, bidder will be required to furnish a totally compliant garment. Taking a blanket exception shall not be acceptable.

_______Exception

3.1 CERTIFICATION AND WARRANTY: The manufacturer of the protective clothing being bid must certify that the garments being offered meet or exceed all requirements of NFPA 1971 (current edition). Manufacturers must also list and label this product with Underwriter’s Laboratories as the third party certification organization prescribed in NFPA 1971 (current edition). Underwriter’s Labs shall have performed ALL certification testing and testing pre-conditioning themselves. Manufacturer testing or pre-conditioning per any type of client data program is unacceptable to this purchaser.

Purchaser reserves the right to contact UL to verify that vendor certification is NOT based upon client generated data. Certification shall include by definition the areas of limited protection to the upper torso including the arms but excluding the head and neck interface area and the hand and wrist interface area. The pant shall provide limited protection resistance to the lower torso including the legs but excluding the foot and ankle interface area. The coat and pant overlap shall provide limited protection resistance to the coat/pant interface area.

When utilized with the appropriate gloves, boots, and helmet (with the appropriate face shield and ear flaps) the coat and pant design shall also be capable
of providing certified bloodborne pathogens protection (as defined by the NFPA Shower Test) to the wrist, ankle and collar interface areas.

When utilized with the appropriate helmet/earflaps and the purchaser specifies the appropriate collar/chinstrap in the custom option section of this specification, the helmet and coat design shall also be capable of providing certified bloodborne pathogens protection to the neck interface area.

MANUFACTURER must also include a written statement of lifetime warranty terms and conditions with the bid package. Manufacturer shall be responsible for repairs due to flaws in workmanship or materials for the life of the garment. Manufacturer must provide upon request, third party certification of the required interface bloodborne pathogen resistant capability.

Manufacturer shall be registered to ISO 9001, *Quality Systems-Model for Quality Assurance in Design, Development, Production, Installation, and Servicing.*

4.1 **LABELING REQUIREMENTS (COAT & PANTS):** Labels shall be permanently and integrally printed onto breathable materials that meet all the requirements for labels of NFPA Standards 1971 (current edition), in addition the label (as provided in the garment) shall meet the NFPA vertical flammability tests. The garment shall be clearly labeled to fully identify the material content of every layer-outer shell, moisture barrier, and thermal liner. In addition, each separable layer of garment shall be labeled in an obvious location including the size, date of manufacture, and an individualized serial number and bar code that matches the corresponding garment liner.

5.1 **TRACABILITY PROGRAM (COAT & PANTS):** Successful bidding manufacturer to have in place a computer maintained traceability program that allows the assignment of a production control number to each garment and traceability from that production control number to individual bolts of cloth used in all three layers of the garment composite construction. Production Control Number to be recorded on garment label and on other protected areas of garment.

6.1 **PATENT CONSIDERATIONS:** Seller agrees to defend Buyer at Seller’s own expense, in all suits, actions or proceedings in which Buyer is made a defendant for actual or alleged infringement of any United States of America or foreign letters patent resulting from Buyer’s use of the goods purchased as a result of this invitation for Bid. Seller further agrees to pay and discharge any and all judgments or decrees which may be rendered in any such suit, action or proceedings against Buyer.
Seller agrees to indemnify and hold harmless the Buyer from any and all licenses, royalty and proprietary fees or costs, including legal costs, which may arise out of Buyer’s purchase and use of goods supplied by the Seller. It is expressly agreed by Seller that these covenants are irrevocable and perpetual.

Exception

7.1 **FLAMMABILITY OF CONSTITUENT MATERIALS:** Labels, bindings, hang up loops and production labels shall be tested for flame resistance and shall comply with NFPA (current edition) vertical flammability testing.

Exception

8.1 **SELF BINDING:** Liner and moisture barrier to be stitched together and turned then top stitched to create a self binding. The extra bulk of separate binding material is specifically disallowed.

Exception

9.1 **THREAD:** All thread to be Nomex of minimum TEX 70 size. Lighter colored garments and trim areas to feature yellow colored thread.

Exception

10.1 **STITCH METHODS:** Stitching should be such that it increases durability in all areas, especially areas of high wear such as seams and trim attaching seams. Stitching in all seams shall be continuous. There shall be no joined stitching in midseam.

10.2 **MAJOR A & B SEAMS:** All major A & B seams (as defined by NFPA 1971) shall be double stitched, double feld throughout all three layers (outer shell, moisture barrier and thermal liner) with the specified Nomex thread (TEX 90). Stitch type #401 to be used in all Major A & B seams (in all three garment layers). Also, all moisture barrier seams shall be tape sealed to meet NFPA water penetration requirements.

*Modified Seam Type LSc-2*

*Double feld seam, modified only to ensure that both stitch lines penetrate all layers of cloth at joining, otherwise as defined by ASTM D 6193-97*
10.3 MINOR SEAMS: Most Minor seams, such as storm shields and mated hems, shall also be stitched with the specified Nomex thread. Detailed stitch and seam type requirements are shown below.

![Seam Type SSae-2](image)

*Seam Type SSae-2 As defined by ASTM D 6193-97, shown (a) before and (b) after required turning*

10.4 SINGLE LAYER HEMMING AND FINISHING

Single layer hemming and finishing shall be stitched with the specified Nomex® thread. Detailed stitch and seam type requirements are shown below.

![Stitch Type EFb-1](image)

*Seam Type SSae-2*

*As defined by ASTM D 6193-97, shown (a) before and (b) after required turning*

10.5 POCKETS

Flat garment pockets shall be stitched with the specified Nomex® thread. Detailed stitch and seam type requirements are shown below.

![Seam Type LSD-2](image)

3-Dimensional pocketing shall feature these same construction details, but the reinforced single stitch Seam Type LSD-1 may be substituted for LSD-2. Detailed seam type requirements are shown below.
Specifications for Clarendon County Fire Department

Seam Type LSd-1
Seam Type LSd-1
As defined by ASTM D 6193-97

Single layer hemming and finishing shall be stitched with the specified Nomex® thread. Detailed stitch and seam type requirements are shown below.

Seam Type EFb-1
Seam Type EFb-1
As defined by ASTM D 6193-97

_____ Exception

11.1 SIZING: Garments shall be available in custom coat chest (in 2” increments), sleeve (in ½” increments) and back length (in 1” increments) and pants waist (in 2” increments) and inseam (in 1” increments) sizes. A full range of woman’s sizing (on woman’s patterns) must also be available. Each sleeve and inseam length shall provide 100% gradation from shoulder to wrist, and hip to ankle to provide proper fit for individual arm/leg lengths. Pattern tailoring to custom fit neck, bicep, hip/seat and thigh circumferences must also be provided when needed at no additional charge. Small, medium, large, and extra large sizing and woman’s garments cut to men’s patterning will not be considered acceptable since proper fit facilitates mobility and minimizes stress.

To ensure a perfect fit, sizing shall be based on actual measurements taken of the firefighter by a trained measurement specialist, or sizing try-ons, or both. Sizing measurements shall be taken according to a schedule and location(s) mutually agreed between the manufacturer and the department. The successful supplier shall provide a minimum of 5 sets of protective clothing made in various sizes from chest size 38 to 54 and pant size 32 to 46 and per the fire department’s specifications for purposes of proper fit while measuring the firefighters. This sizing set shall be provided in no more than 2 weeks from notification. A representative from the dealership or manufacturer shall be on hand to secure size and fit on a per firefighter basis and shall
train representatives from the CLARENDON COUNTY FIRE DEPARTMENT in proper measuring of protective clothing.

________Exception

12.1 POCKETS: If exterior pockets are specified in either the COAT CUSTOM OPTIONS TO BE PROVIDED section or in the PANT CUSTOM OPTIONS TO BE PROVIDED section, the following requirements shall apply to all such custom option specified exterior pockets:

All pockets and flaps shall be reinforced at the top corners with bar tack stitching.

All pockets shall be reinforced with an extra layer of NFPA-certified outer shell, moisture barrier, or other NFPA-certified reinforcement material for extra durability. The exact location of the reinforcements shall be identified in the custom options section(s).

All pockets shall have a means to drain water and shall have a means of closure.

All pocket closures shall be made with hook and loop fastener tape a minimum of 1.5 inches (3.8 cm) wide and a flap. The specific placement of the closure system shall be declared at the time of order.

________Exception

13.1 TAILORED GRADING OF GARMENT LININGS: Wherever garment linings are specified, including but not limited to thermal linings and moisture barriers, each such lining layer shall be tailor-graded to fit within the overall garment composite of all layers without causing bunching or binding when the garment is worn.

________Exception

14.1 POINTS OF STRESS: All points of stress shall be reinforced with sturdy bartacks. Rivets will not be considered acceptable because of the possibility of rust and electrical or heat conduction.

________Exception

15.1 HIGH TEMPERATURE, NFPA CERTIFIED MATERIAL REINFORCEMENTS: Reinforcements to be provided at cuffs and pockets and shall meet the requirements of NFPA 1971. Purchaser has determined the type of reinforcement material for their own use and purposes. Therefore, alternate or substitute reinforcement materials other than those specified will not be considered.

________Exception
16.1 **REPAIRS AND ALTERATION SUPPORT:** Successful bidding manufacturer to provide, free of charge, reasonable quantities of NFPA certified thread, materials, etc. to allow the department to manage their ongoing internal maintenance efforts. Also, successful bidding manufacturer to have on-call at no charge, during normal business working hours, a liaison for the repair department to assist the Fire Department on a telephone consultation basis, on any maintenance/repair questions that arise. Additionally, successful bidding manufacturer will agree to expedite, on their cost only basis, any repairs required to be done at the manufacturer’s plant, rather than in department, over the life of the contract. The contract period for repairs shall be for a ONE (1) year period beginning from the date of receipt of the product.

_______Exception

17.1 **CONTRACT PERIOD:** The contract period for pricing shall be for a ONE (1) year period beginning from the date of the award with three (3) one-year extensions not to exceed 5% of the contract price over the previous year. During the contract period the manufacturer is responsible for making all necessary product changes as required to be the latest editions of NFPA 1971 *Standard of Protective Ensemble for Structural Fire Fighting*. Dramatic changes in the standards, which have significant impacts on the cost of the garments, shall be allowed by mutual agreement with the appropriate justifications and a 60-day notice.

The continuation of the terms, conditions, and provisions of any resulting contract beyond the fiscal year is subject to approval and ratification by the department and appropriation of the necessary money to fund said contract for each succeeding year. This contract will be for quantities of structural gear, not to exceed 45 sets per year of the contract.

_______Exception

18.1 **BREATHABILITY REQUIREMENT:** Excluding where required by NFPA standard, necessary for functionality, or specifically called out in the custom option sections, all materials used in the construction of the garments shall be breathable and all moisture barrier material must be as specified in the following materials section, or must be Crosstech.

The breathability requirement includes but is not limited to: collar, chinstrap, storm shield, fly, waterwells, front coat facings, labels, and reinforcement cushioning where applicable.

Areas where non-breathability is allowed (absent Custom Option specifications): trim, hook and loop fastening, hardware or hardware backing, and external pocket linings.

_______Exception
### Specifications for Clarendon County Fire Department

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>19.1 SEAM PROTECTION AT CUFFS:</strong></td>
<td>At the coat and pant cuff Major A seams, the reflective trim shall stop just before the folding of the full feld seam and for additional abrasion protection be covered by a sewn on, 0.75” (1.91 cm) wide black Nomex webbing material laid on top of the Major A seam and covering each end of the trim.</td>
</tr>
<tr>
<td><strong>20.1 THERMAL PROTECTIVE PERFORMANCE:</strong></td>
<td>The assembled garment, consisting of an outer shell, moisture barrier, and thermal liner, shall exhibit a TPP (Thermal Protection Performance) rating of not less than 35. The successful bidding manufacturer shall include the TPP rating of the assembled garment, as specified by the Fire Department, with their bid package.</td>
</tr>
<tr>
<td><strong>21.1 DELIVERY:</strong></td>
<td>Delivery is of utmost importance to the fire department. A true and accurate delivery must be specified. Delivery shall be no more than 60 calendar days after receipt of order.</td>
</tr>
<tr>
<td><strong>22.1 COAT:</strong></td>
<td>To avoid liability and interface problems, it is the intent of the purchaser that coats and pants shall be procured from the same manufacturer.</td>
</tr>
<tr>
<td><strong>23.1 DESIGN CONCEPT (STYLING):</strong></td>
<td>The coat shall be approximately 6 inches (15.2 cm) longer at the rear hem than at the front and provide continuous and unbroken moisture barrier and thermal liner protection from the collar seam to the hem at the bottom of the coat tail. The coat composite (all three layers) shall not gap when the firefighter is bending, crawling or climbing. Gapping shall be determined as defined by NFPA 1500 with both arms fully extended overhead and wearer bending to rear, sides and front. The actual length of coats (shorter or longer) will be determined by each individual’s torso length. Coat must interface properly with standard waist height pants.</td>
</tr>
<tr>
<td><strong>24.1 PATTERNING CONCEPT:</strong></td>
<td>Garments shall feature a tailored three piece body (one piece back) construction throughout the outer shell, moisture barrier and thermal liner. One piece garments (either all layers or some layers) will not be considered acceptable since they cannot be tailored to hard fit personnel. Similarly, garments with seams in mid back will not be considered acceptable because of backbone irritation that can occur with SCBA use. To facilitate individual tailoring needs, the major A &amp; B seams...</td>
</tr>
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</table>
joining the one-piece back to the right and left front body panels (outer shell and all interior layers) shall be located at the most lateral position when the coat is laid flat for inspection.

Exception

25.1 PATTERNING REQUIREMENTS: To assure maximum freedom of movement and reduce kinetic resistance with minimum garment weight and bulk; coat patterning should include the following features:

- Degree of slope on shoulders to be no more than 20%.
- Hydraulic Butterfly sleeve patterning with 85 degree Lift Up Release Action shall be provided to minimize coat hem rise.
- Coat hem rise with overhead reach of both arms to not exceed 4” at maximal extension on properly fitted garments.
- Sleeve attachment shall minimize shoulder lift and allow a full 360 degrees freedom of movement.
- Cuff shell/liner retraction shall not exceed 1” when both arms are raised overhead to help eliminate wrist exposure.
- 10” chest over-sizing shall be provided.
- Reach when measured from cuff to cuff, with coat lying flat, and standard length sleeves extended to each side, shall be provided as detailed below:

<table>
<thead>
<tr>
<th>Chest Size</th>
<th>Standard Reach</th>
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<tbody>
<tr>
<td>40”</td>
<td>66”</td>
</tr>
<tr>
<td>42”</td>
<td>67”</td>
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<tr>
<td>44”</td>
<td>68”</td>
</tr>
<tr>
<td>46”</td>
<td>68”</td>
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</tbody>
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Exception

26.1 DRAG RESCUE DEVICE (DRD): Manufacturer shall supply an NFPA required and certified Drag Rescue Device with each coat. The device shall be designed to fit each individual chest size. Each strap will be properly labeled with DANGER labels that include what chest size the Rescue Strap is designed to fit along with instructions for care and installation/removal of the Rescue Strap.

Rescue Strap shall be designed in a fashion that it functionally provides a dynamic and articulated action and to eliminate excess strapping material hanging down the back when installed between the garment’s liner and outer shell.
The device shall be constructed using two components: a 1.75” (4.45 cm) Kevlar webbing grab handle; and a free-floating loop of Kevlar rope to go around each of the wearer’s arms/shoulder. The grab handle shall be positioned at the rear of the upper torso and through the grab handle.

The grab loop shall extend upward and pass through a reinforced slot in the coat outer shell just below the center rear of the collar seam where it will exit the outer shell where it will be covered by an outer shell tunnel. The protruding grab loop shall then fold back down over the top of the tunnel and be stowed by Velcro with the pile sewn for the width of the tunnel and the hook sewn on the grab loop. There shall then be an outer shell flap sewn below the collar that will fold down over the stored grab loop and held in place with Velcro to reduce the chances of snagging the grab loop by accident.

To facilitate comfort and safety the Grab Handle shall be constructed of soft and pliable Kevlar webbing meeting the following specifications:

Description 100% Kevlar Double Plain Weave
Width 1.75” (4.45 dm) Thickness 0.064” ± 0.010”
Tensile 5,000 lb minimum (22.24 kN)

To facilitate comfort and safety the free-floating loop shall be constructed of soft and pliable Kevlar rope meeting the following specifications:
Description 100% Kevlar Tubular Plain Weave
Width .038” (.097 cm) Thickness 0.144” ± 0.005”
Tensile 3500 lb minimum (15.57 kN)

Rescue Strap shall be sewn with Kevlar thread with a minimum Tex size T-210

_______Exception

27.1 **LINER ATTACHMENT & INSPECTION PORT:** The completed liner/moisture barrier assembly shall attach by means of four (4) evenly spaced glove snaps to each outer shell front facing to reduce weight and bulk/stiffness. To provide continuous moisture and pathogen protection at the front, the liner shall be positioned so it is sandwiched between the coat front facing and a breathable pathogen shield. The use of zippers or Velcro in this area shall not be allowed due to their added weight, bulk and stiffness.

Liner sleeves shall be attached at the outer shell cuff by means of snaps on 2 sets of outer shell fabric tabbing strips per cuff. These snaps shall be isolated by the tabbing material so that it will not abrade against the outer shell.

To provide continuous moisture and pathogen protection at the neck, the liner shall be positioned so it is sandwiched between an outer facing pathogen shield, and inside
facing of the specified outer shell material folded over and both sewn in at the neck seam.

Attachment shall be by means of four (4) glove snaps that penetrate ONLY the layer of the attachment facing towards the liner, so that metal contact at the wearer’s neckline is completely eliminated.

The liner system shall incorporate a Velcro port at the lower right front body panel to allow for field inspection of the “internal” condition of the moisture barrier membrane, seam sealing and thermal insulating layer/quilt stitching.

28.1 **COAT LINER LABEL:** Shall be integrally printed on FR Cotton Indura and lock stitched to the inside right body panel in a fashion to provide an inside liner pocket.

29.1 **COAT SHELL LABEL:** Shall be integrally printed on FR Cotton Indura and lock stitched to the shell along one side of the label at the back of coat.

30.1 **COLLAR:** Collar layer construction, consisting of a layer of breathable moisture/pathogen barrier material and another layer of NFPA approved insulating material, sandwiched between two layers of specified outer shell material and at least 4” high. The design shall incorporate in the patterning a natural contour that will allow proper fit and performance in the standing (upright) or stowed position. There shall be no vertical or horizontal seams or stitching in the body of the collar, since this may weaken collar integrity. Left outside of collar to have sewn piece of 3” x 5” Velcro hook to insure maximum adjustability when engaging chinstrap/collar closure. Each collar shall be graded to individual coat sizes.

31.1 **CHINSTRAP:** Chinstrap layered construction identical to that of the collar configuration listed in the previous paragraphs. Chinstrap shall be 8” long across the top corners, 11” long across the bottom corners, and 4” vertical height measured at the center. The chinstrap shall also incorporate a knit insert for comfort which shall measure 5”W x 3 ½”H. The top edge shall incorporate extra material in the shape of a crescent to ensure full interface closure of the collar, chinstrap and coat front closure/stormflap in order to pass the whole garment water tight integrity test. The leading underside edge of the chinstrap shall have a vertical strip of 1.5” velcro pile to insure closure and passage of the whole garment water tight integrity test.
32.1 **HANG UP LOOP:** 80 pound tear strength hang up loop at the interior collar seam to be provided. Loop to be constructed of triple layers of the specified outer shell material lock stitched to the coat. Webbing is not acceptable.

Exception

33.1 **SLEEVES:** Shall be individually graded by coat size and sleeve length to prevent stove piping. Extra full cut one piece outer shell set in sleeves with built in bellows for maximum freedom. To reduce the chances of possible top seam failure in that high thermal exposure area, the sleeve Major A seam shall follow the underside of the arm and shall not cross over the outside of the elbow joint. Sleeve seam and sleeve attachment to the coat body in all layers shall be 100% double felled and double stitched for maximum strength.

Exception

34.1 **EXTERNAL WRISTLET:** 100% Nomex knit outer wristlet to be mounted to the end of the outer shell sleeve to prevent debris movement up the sleeve (between outer shell and moisture barrier/thermal liner assembly). There shall be long style Nomex knit inner liner wristlets which shall provide a thumb attachment by means of a Nomex tabbing material bartacked at each end approximately 2” apart at the cuff opening.

Exception

35.1 **INNER WRISTLET & WATERWELL:** 100% Nomex knit inner wristlet protected by a flame and moisture resistant waterwell must be featured on every garment. Inner wristlet shall be sewn to the thermal liner sleeve end (not to the outer shell). A specified moisture barrier waterwell with an elastic gather shall be sewn to the moisture barrier sleeve end with all seams sealed to allow maximum channeling of water away from inside the moisture barrier/thermal liner sleeve end and pass the whole garment water tight integrity test. Thermal liner/wristlet shall be bartacked and seam sealed at the junction of the moisture barrier sleeve to waterwell seam to prevent liner pull out. This inner waterwell assembly shall be interface capable with the appropriate glove to provide wrist protection during the liquid tight integrity test.

Exception

36.1 **FRONT CLOSURE PROTECTIVE OVERLAP:** Two inch wide panels of breathable moisture/pathogen barrier (film facing outward) and specified thermal liner material shall be provided at coat front closure facings to preclude any type break in
the protective envelope. The entire circumference of a closed coat will consist of specified shell, moisture barrier and thermal liner materials.

The inside trailing edge of each 2” wide inner panel shall have the breathable moisture/pathogen material wrapped around the edge by ½” to create an anti-wick guard to prevent soak through during the required shower test. An additional layer of 6” wide breathable moisture/pathogen barrier material (film facing outward) shall be sewn between the 2” wide panels and outer shell coat body for the entire length of coat front in a fashion to prevent liquid entry during the whole garment water tight integrity test.

________Exception

37.1 MATERIALS: Specifier has determined the ONLY acceptable combination of materials. Any substitution of materials shall be grounds for immediate disqualification of bid without further consideration.

________Exception

38.1 OUTER SHELL: 7.0 oz Kevlar/Nomex Rip Stop (Advance) – Khaki

________Exception

39.1 THERMAL LINER: 7.4 oz – 86% Kevlar Filament, 14% Nomex/FR Rayon Spun Yarn; 2 Layers E89 - Safety Components Glide®

________Exception

40.1 MOISTURE BARRIER: Crosstech® Type 2F

________Exception

41.1 COAT CUSTOM OPTIONS TO BE PROVIDED: Instructions in this section that contradict earlier specifications or statements supersede those earlier specifications or statements as long as the required certifications are not compromised. The following options shall be included in the construction of the coat:

- Detachable Liner
- Coat cuffs
- Liner label pocket
- 2 Postman take up straps
- New York-2 trim – 3” Lime 2-tone Scotchlite (Double-stitched)
- 2” Velcro/Zipper Coat Closure
- LTO Comfort Chinstrap
- Inspection port liner
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<tr>
<td>Yes</td>
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</table>

- Handwarmer pockets
- Articulating Rapid Rescue Strap
- Hem Patch on “Tails” w/ Velcro attachment
  - Kevlar/Nomex (Khaki)
  - Firefighter’s 1st Initial + Last Name
  - 3” sewn letters – lime Scotchlite
  - OK to use 2” letters to fit sewn periods
- Mic tab
  - 1” x 2.5”
  - Left Chest
- Mic tab
  - 1” x 2.5”
  - Right Chest
- Mic tab
  - 1” x 2.5”
  - On Shield (stormflap) - place 2.5” down from top of shield
- Radio Pocket
  - Left Chest
  - 8” x 3” x 2”
  - Flap notched to accommodate radio antenna with Velcro closure

#### Exception

42.1 **PANTS:** To avoid liability and interface problems, it is the intent of the purchaser that coats and pants be procured from the same manufacturer.

43.1 **MATERIALS:** Specifier has determined the ONLY acceptable combination of materials. Any substitution of materials shall be grounds for immediate disqualification of bid without further consideration.

#### Exception

43.2 **OUTER SHELL:** 7.5 oz Kevlar/Nomex Rip Stop (Advance) – Khaki

43.3 **THERMAL LINER:** 7.4 oz – 86% Kevlar Filament, 14% Nomex/FR Rayon Spun Yarn; 2 Layers E89 - Safety Components Glide®

43.4 **MOISTURE BARRIER:** Crosstech® Type 2F

#### Exception

44.1 **DESIGN CONCEPT (Styling):** Pant shall be of a traditional waist high only design to facilitate full torso ventilation of front, rear and sides of trunk for maximum body cooling effect to help minimize fire fighter heat stress. For this reason, other than waist high pants shall not be considered acceptable or “as equal” since additional trunk
wrapping traps heat and moisture increasing heat stress build up while also creating mechanical resistance when covering the natural torso flexion point of the waist.

________Exception

45.1 PATTERNING CONCEPT: Garments shall feature a tailored four piece outer shell with two piece, moisture barrier and lining. A four piece liner shall be provided at no charge when and if an individual’s tailoring needs require it.

________Exception

46.1 PATTERNING REQUIREMENTS: To assure maximum freedom of movement and reduced kinetic resistance with minimum garment weight and bulk, the pants patterning shall incorporate:

- Hydraulic, swivel action legs to torso interface
- An oversized diamond shaped crotch insert, graded according to size, for maximum action stride, optimum stepping and no “in-crotch” seaming.
- To meet individual tailoring needs, and offer superior functionality, diamond shall extend from just above the left knee to just above the right knee and be centered equally from front to rear. Width of diamond at top of crotch shall be approximately proportionally, graded to waist size and inseam length.
- Pants to rest in normal body line balance of 22” center to center distance at the cuff for 42” waist, 30” inseam pants.
- Provide for an alteration point at the hips so that during manufacture the hip dimension can be adjustable in 2” increments.

________Exception

47.1 SUSPENDER BUTTONS: Eight heavy duty, rust resistant suspender buttons to be positioned around the waist. Suspender buttons shall be mounted through waist band of triple layer outer shell material that is internally reinforced with a ¾” wide additional band of coated needlepunch Aramid.

________Exception

48.1 LINER ATTACHMENT & INSPECTION PORT: Moisture barrier and thermal liner assembly shall be attached to the outer shell at the cuff by means of two (2) Nomex webbing snap assemblies per leg and at the waist with seven (7) evenly spaced glove snaps at the waistband.

Thermal liner/moisture barrier shall incorporate a Velcro port at the right side fly seam to allow access for field inspection of the moisture barrier membrane, seam sealing and thermal insulating layer/quilt stitching.
Specifications for Clarendon County Fire Department

Complies

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<th>Yes</th>
<th>No</th>
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49.1 **PANT LINER LABEL:** Shall be integrally printed on FR Cotton Indura and lock stitched to the inner left hip area.

_____Exception

49.2 **PANT SHELL LABEL:** Shall be integrally printed on FR Cotton Indura and lock stitched at the top rear of the waist, at the inside.

_____Exception

49.3 **WEAR REDUCTION PANT CUFF (angle cuff):** The bottoms of each leg shall be provided with double-stitched hems to help reduce rip out of hem area during heavy use. The rear portion of each leg hem shall be notched in an area of approximately 8” wide x 1½” high to help prevent the hem from catching on the heels of the fire fighter’s boots or dragging on the ground. The cuff shall additionally be protected by black Arashield.

_____Exception

49.4 **FLY FRONT:** Outer shell fly shall be lock stitched to the left side of front opening and be in proportion to waist size and crotch rise in both length and width. Fly inner lining shall extend at least 2” to the left of the outer shell fly attachment seam and shall be constructed of certified breathable moisture barrier (film facing outward) and thermal liner. The right front pant opening shall have an internal facing extending at least 2” to the right and constructed of specified fabric. In combination with liner, the system shall offer 360 degrees protection without gaps during movement of outer shell moisture barrier and thermal liner. Closure shall be by means of minimum 1.5” Velcro and zipper. All construction techniques used shall provide liquid penetration protection under the whole garment watertight integrity test. Fly shall be graded to the waist size of garments and crotch rise.

_____Exception

49.5 **REINFORCED CUSHIONED KNEE:** The cushioning for the Knee reinforcement, and the thermal pad sewn to the internal side of the thermal liner assembly, shall provide a minimum of 25 CCHR and be comprised of breathable, fiber based materials.

49.6 **PANT CUSTOM OPTIONS TO BE PROVIDED:** Instructions in this section that contradict earlier specifications or statements supersede those earlier specifications or statements as long as the required certifications are not compromised. The following options shall be included in the construction of the pants.

-Narrow 2” Velcro Fly with Hook and Dee

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- Detachable liner
- Inspection Port liner
- 3” cuff trim – Lime 2-tone Scotchlite (Double-stitched)
- Fly-zipper closure
- BiFlex Heat channel knees color matched to outer shell (Horizontal strips in BiFlex knee to be Arashield Black)
- Angled cuffs – pants (Double-stitched)
- Arashield Black Pants cuffs (Double-stitched)
- 2 Postman take up straps
- Bellows Pockets – pants
  - 9” x 9” x 2.5”
  - Bellows Pocket Divider
  - Divide Right Bellow Pocket – 5.5” from front
  - Velcro closures on Bellows Pockets

Exception

57.1 SUSPENDERS: 8-Point suspenders with action back. Dynamic Action Suspenders shall have a floating pivot point action mid back. Suspenders shall interface with pants by means of 8-point traditional metal hooks that connect to the suspender buttons attached to the pants at waist. Suspenders shall include padding for shoulder suspension cushioning. Suspenders shall feature a quick adjust mechanism to allow for snugged fit after easy donning.

Exception

STRUCTURAL BOOTS


58.2 Boots upper should be constructed of flame and heat resisting vulcanized rubber and shoe fit engineered. The successful bidder may also offer, as an option, boots constructed of leather outer material and appropriate waterproof insulating lining. The lining of the boot should be constructed of polyester needled felt with heel reinforcement. The insole should be a removable superknit-covered polyurethane footbed. Stainless steel, puncture-resisting bottom plate midsole with a steel triple-ladder shank. The outsole should be constructed of flame and heat resisting lug design material. Double-reinforced pull loops. Cushioned shin guard and abrasion resisting toe. Light-Reflecting material should be provided on the outer materials of the boot, to increase visibility.
STRUCTURAL HELMETS

59.1  Structural firefighting helmets shall meet or exceed the current edition of NFPA 1971 Standard on Protective Ensemble for Structural Firefighting.

59.2  The successful bidder will supply a “traditional-style” structural fire helmet, constructed of high-temperature composite material. The helmet faceshield hardware shall be constructed on non-corroding, high-temperature glass-filled material. Provided eye protection should retract completely into the head space. The front headband should be adjustable to interface with any SCBA mask. Fit adjustments should be made via a three-position rear ratchet height adjustment for a secure and comfortable fit. The inner protective shell should be capable of releasing in a fall, to prevent the outer shell of the helmet from becoming lodged in debris. The helmet should be secured to the wearer's head via a soft, black nomex chinstrap with one-hand quick-release buckle and postman slide for quick removal and adjustment. The helmet shall have a nomex or PBI/Kevlar earflap for increased neck/ear coverage and protection and removable flannel cushioning on the headband.

STRUCTURAL FIREFIGHTING GLOVES

60.1  Structural firefighting gloves shall meet or exceed the requirements of the current edition of NFPA 1971 Standard on Protective Ensemble for Structural Firefighting.

60.2  Gloves styling shall be Gauntlet. Glove forchettes, thumb shield and index finger shall be constructed of Flexor grain cowhide, 3.0 oz weight. Palm and back should be constructed using Koala Gold/Black split cowhide. The shell should feature snag resistant 3M reflective nail guards. Arashield grip enhancer should be double-stitched into the base of the index finger. Flex-points with knitted kevlar strategically place below the nail guards at the first knuckle on the fingers and thumb should be provided. The construction should prevent unnecessary glove creep/shift during intensive usage. All shell features should be double-stitched with Kevlar thread. The thermal lining should be constructed of tech fleece 6.0 oz/yd, 185 g/m Kevlar and lensing non-woven (stitchbonded) fleece with 8.0 gsm web adhesive laminated to the back of the fabric. The protective barrier should be constructed of Gore Crosstech film, laminated to the thermal lining. The glove should be provided with a 1/4” fire retardant leather hanger loop. Reflective safety enhancements should be added at the finger tips, upper back and side of hand for better visibility.

Exception