

CITY OF HANAHAN FIRE DEPARTMENT REQUEST FOR BIDS

Solicitation Number:		
Solicitation Date:		
Proposal Submission Deadline:	 	
Proposed Award Date:		

City of Hanahan Procurement 1255 Yeamans Hall Road Hanahan, South Carolina 29410 (843) 576-5254



CITY OF HANAHAN PROCUREMENT DEPARTMENT

Kitty Farias: Purchasing Agent 1255 Yeamans Hall Road Hanahan, S.C. 29410

CITY OF HANAHAN FIRE DEPARTMENT REQUEST FOR BID – BUNKER GEAR LEASE | PURCHASE

BID TITLE: BUNKER GEAR – CITY OF HANAHAN FIRE DEPT.

BID NUMBER: **COH#-020821**

CLOSING DATE AND TIME: February 25, 2021 @ 2:00 P.M. EST (local)

You are invited to submit a Bid in accordance with the requirements of this solicitation, which are contained herein. It is requested that your Bid be submitted to the City of Hanahan Procurement Office not later than February 25, 2021 at 2:00 P.M. EST (local time).

Kitty Farias Procurement Agent 2nd Floor 1255 Yeamans Hall Road Hanahan, SC 29410 PH: (843) 266-0723

kfarias@cityofhanahan.com

DEADLINE FOR WRITTEN QUESTIONS IS: February 22, 2021 at 2 p.m., Eastern Standard Time.

An official authorized to bind the Bidder must sign the Bid and it shall contain a statement to the effect that the Bid shall remain valid for a period of at least ninety (90) calendar days from the closing date for submission of bid. The bid must be submitted in a sealed envelope showing the above solicitation title, bid number and closing date/time and Bidder's business name and address.

This request for Bid does not commit the City of Hanahan to award a contract, to pay any cost incurred in the preparation of a Bid or to procure or contract for the articles of goods or services. The City of Hanahan reserves the right to accept or reject any or all bids received as a result of this request, to negotiate with all qualified bidders, or to cancel in part or in its entirety this Bid if it is in the best interest of the City to do so.

Bidders can download a copy of the BID document and any amendments from the City of Hanahan Web Site (preferred) or request by email to kfarias@cityofhanahan.com:

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WEB ADDRESS: https://cityofhanahan.com/government/administration/purchasing/

GO TO: - DEPARTMENTS

- ADMINISTRATION - PURCHASING

- SOLICITATIONS

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EXHIBIT A - Attached

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SECTION 1 GENERAL INFORMATION

- 1.1 Bids will be considered as specified herein or attached hereto under the terms and conditions of this Request for Bids.
- 1.2 A Bid must be made in the official name of the firm or individual under which business is conducted (showing the official business address) and must be signed in black ink by a person duly authorized to legally bind the person, partnership, company, or corporation submitting the Bid.
- 1.3 Bidders are to include all applicable requested information and are encouraged to include any additional information they wish to be considered. **Additional information shall be a separate section of the Bid and shall be identified as such.
- 1.4 One (1) clearly identified original and one (1) copy of your Bid are required. The Bid must be complete, clear and concise.
- 1.5 Bids will be received by City of Hanahan until 2:00 P.M. on the closing date shown. Bids must be submitted to or at the time, date and exact location specified to be considered. No late Bids, Emailed, telegraphic (facsimile), or telephone Bids will be accepted.

BID TO BE MAILED TO:

City of Hanahan Procurement Office ATTN: Kitty Farias 1255 Yeamans Hall Road Hanahan, S.C. 29410

HAND CARRY/DELIVERY SERVICE TO:

City of Hanahan Procurement Office ATTN: Kitty Farias 1255 Yeamans Hall Road Hanahan, S.C. 29410

- 1.6 Bidder is required to have printed on the envelope or wrapping containing his Bid; Bidder business name and address, the Bid title, Bid number and the Bid closing date and time.
- 1.7 City of Hanahan shall not be responsible for unidentified Bids.
- 1.8 Bidders mailing their Bid must allow a sufficient mail delivery period to insure timely receipt of their Bid. City of Hanahan is not responsible for Bids delayed by mail and/or delivery services of any nature. Bid received after the set time for closing will be returned unopened.
- 1.9 Bids may be withdrawn by Bidder prior to, but not after, the time set for the closing. A telegraphic or email request is acceptable provided it is received before the closing, and written confirmation of the withdrawal has a postmark prior to the closing.

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- 1.10 All entries shall be entered in ink or typewritten and shall remain valid for a period of not less than ninety (90) calendar days. Mistakes may be crossed-out and corrections inserted adjacent thereto, and shall be initialed, in ink, by the person signing the Bid.
- 1.11 Offers, amendments thereto or withdrawal requests must be received by the time advertised for BID closing to be timely filed. It is the Bidder's sole responsibility to ensure that the documents are received by the person (or office) at the time indicated in the solicitation document.
- 1.12 By submission of an offer, you are guaranteeing that all goods and services meet the requirements of the solicitation during the contract period.
- 1.13 Bidders must clearly mark as "Confidential" each part of their offer which they consider to be proprietary information that could be exempt from disclosure under Section 30-4-40, Code of Laws of South Carolina, 1976 as amended (Freedom of Information Act). If any part is designated as "confidential", there must be attached to that part an explanation of how this information fits within one or more categories listed in Section 30-4-40. City of Hanahan reserves the right to determine whether this information should be exempt from disclosure and no legal action may be brought against City of Hanahan or his agents for its determination in this regard.

1.14 City of Hanahan reserves the right:

- 1.14.1 To accept or reject any or all Bids received as a result of this solicitation, or to cancel in part or in its entirety this solicitation if it is in the best interest of the City to do so;
- 1.14.2 To waive any or all informalities;
- 1.14.3 To solicit additional information from the Bidders, or any one Bidder should City of Hanahan deem such information necessary;
- 1.14.4 To consider modifications received at any time before the award is made, if such action is in the best interest of the City; and,
- 1.14.5 To negotiate contract terms, conditions and cost.
- 1.15 Samples of any articles deemed necessary must be furnished free of any cost to City of Hanahan. These samples may be retained for future comparisons. Any samples not destroyed by testing or not retained for comparisons will be returned to the Bidder at the Bidder's expense upon request.
- 1.16 This contract will be awarded to the Bidder whose Bid is within the competitive range and determined to be in the best interest of City of Hanahan.
- 1.17 The words "Contractor", "Vendor", "Bidder", "Bidder", "Consultant", "Proposer", are used interchangeably throughout this Solicitation to define the companies submitting Bids, and replace terms such as person(s), firm(s), or corporation(s).
- 1.18 If the Bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the Bid Solicitation, it shall immediately notify the City's Procurement Office of such error in writing and request modification or clarification of the document. The Bidder is responsible for clarifying any ambiguity, conflict, discrepancy; omission or other error in the BID Solicitation, or it shall be deemed waived.

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- 1.19 Failure to submit all required information may be determined as a non-responsive Bid.
- 1.20 This contract will be awarded to the Bidder whose Bid is within the competitive range and determined to be in the best interest of City of Hanahan. Evaluation of Bids and selection of a Bidder are set forth in "Special Instructions".
- 1.21 This solicitation does not commit City of Hanahan to award a contract, to pay any cost incurred in the preparation of a Bid or to procure or contract for the articles of goods or services.
- 1.22 <u>AMENDMENTS</u>: If it becomes necessary to revise any part of this Solicitation, an amendment will be posted on the Web Page at the address provided on the Cover Sheet. All amendments become part of the Request for Bids and are contractually binding whether or not received by the Bidder.
- 1.23 LEFT BLANK
- 1.24 <u>ADDITIONAL INFORMATION/QUESTIONS</u>: Bidders requiring additional information may submit their questions in writing. Questions may be directed to Kitty Farias, Purchasing Agent, at telephone number (843) 576-5254 or email at kfarias@cityofhanahan.com. The deadline for submitting written questions is February 22, 2021 at 2 PM EST. Verbal information obtained otherwise will not be considered in the awarding of the Bid.
- 1.25 <u>AFFIDAVIT OF NON-COLLUSION</u>: An Affidavit of Non-Collusion form contained herein shall be signed, notarized, and become a part of the Bid. **Bids submitted without this Affidavit may be rejected as nonresponsive.**

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SECTION 2 TERMS AND CONDITIONS

- 2.0 <u>CONTRACT PERIOD</u>: ANY AWARD RESULTING IN A CONTRACT WILL DETERMINE A PERIOD SET FORTH IN THE CONTRACT DOCUMENTS OR AGREEMENT BETWEEN THE PARTIES.
- 2.1 <u>APPLICABLE REGULATIONS/POLICIES</u>: The Code(s) of the City of Hanahan Ordinances, Rules and Regulations and Policies shall apply. It shall be the responsibility of the Bidder to be familiar and comply with said regulations/policies.
- 2.2 <u>PROVISIONS REQUIRED BY LAW</u>: Each and every provision of law and any clause required by law to be in the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.
- 2.3 <u>WAIVER</u>: The City reserves the right to waive any provisions of this solicitation.
- 2.4 <u>COMPENSATION</u>: The City shall pay the rate as agreed after properly conducted negotiations and award of the contract. The Contractor's employees shall not acquire status as a City employee and shall not accrue sick or annual leave, be eligible to participate in the retirement Systems or have a right to grievances through the City procedures instituted for City personnel.
- 2.5 <u>PUBLIC RELEASE OF INFORMATION</u>: Contractor shall not advertise, issue a press release or otherwise publish information concerning this Bid or contract without prior written consent of the City. The City shall not unreasonably withhold permission. Contractor agrees not to refer to award of this solicitation/contract in commercial advertising in such manner as to state or imply that the products or services provided are endorsed or preferred by City of Hanahan.
- 2.6 <u>PAYMENT TERMS</u>: Contractor will submit invoices to the City, which shall include a detailed listing of charges upon completion of services. Within ten (10) days of receipt of an invoice, City shall notify Contractor of any dispute with the invoice and Contractor, upon such notice, shall provide to City back-up data supporting the invoice. City and Contractor will, thereafter, promptly resolve any disputed items. Payment on undisputed invoice amounts is due upon receipt of the invoice by City and is past due thirty (30) days from the date the invoice is received.
- 2.7 <u>TERMINATION</u>: Subject to the provisions below, the City may terminate the solicitation/contract by providing a thirty (30) day written advance notice to Contractor.

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- 2.7.1 <u>Termination for Convenience</u>: In the event this solicitation/contract is terminated or cancelled for the convenience of the City, the City will negotiate reasonable termination costs, if any.
- 2.7.2 <u>Non-Appropriations</u>: Any contract entered into by the City 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. Any final agreement accepted by the City MUST include the following language:

This contract is approved and funded contingent upon annual appropriations being established by City of Hanahan Council to provide funding necessary to meet the requirements of the contract. Such funding is approved on a fiscal year basis with the fiscal year commencing on July 1st and terminating on June 30th of the following year. In order for the contract to remain in effect, such appropriation must be approved on an annual basis throughout the term of the contract. In the event that an annual appropriation is not approved, City of Hanahan shall not be held responsible for any liabilities beyond the remaining annual term prior to the new budget year.

- 2.7.3 <u>Termination for Cause</u>: The City may terminate the contract at any time for the failure of the Contractor to perform any obligation under this solicitation/contract, or for any other good and sufficient cause. The City shall only pay Contractor for services rendered prior to the termination notice date, less any liquidation costs assessed for Contractor non-performance.
- 2.7.4 <u>Mitigation of Termination Costs</u>: In the event that the contract is terminated, Contractor will be liable for any costs in excess of contract pricing incurred by the City to complete the contract or provide for continuity of services. The City reserves the right to purchase any or all services and materials on the open market. The City will not entertain subsequent offers from the terminated Contractor until these liquidation costs are paid by Contractor.

Such costs may include, but are not limited to, the cost of using the City's employees or employees of any other entity to perform the obligations of the contract. The City may obtain any such reimbursement by deduction from payments otherwise due to Contractor or by any other proper and lawful means. All deductions from any money due Contractor are to be as liquidated damages and not as a penalty. It is the City's intent to give Contractor a reasonable opportunity, whenever practicable, to correct any such failure to perform or satisfactorily perform its responsibilities and duties. In no circumstances shall any uncorrected situation extend for more than five days. The City will make the following deductions from the contract sum in the event that the contractor fails to perform any of the required work within the required time limits in the event the City carries out the work using its forces or another contractor.

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- 2.7.4.1 For use of City's forces actual cost involved.
- 2.7.4.2 For use of another contractor the amount charged by said contractor.

The City reserves the right to hold back and/or withhold part of complete payments for unsatisfactory work, deficiencies, etc. until said defects are satisfactorily corrected or cleared.

- 2.7.5 Excusable Delay: Contractor will not be liable for any excess costs if the failure to perform the contract arises out of causes beyond the control and without the fault or negligence of the contractor. Such causes may include, but are not restricted to acts of God (force majeure) or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case the failure to perform must be beyond the control and without the fault or negligence of the contractor. If the failure to perform is caused by the fault of a subcontractor, and if such default arises out of control of causes beyond the control of both Contractor and subcontractor, and without the fault or negligence of either of them, Contractor will not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit Contractor to meet the required delivery schedule.
- 2.8 S.C. LAW CLAUSE: Upon award of a contract or Purchase Order under this Bid, the person, partnership, association, or corporation to whom the award is made must comply with the laws of South Carolina which require such person or entity to be authorized and/or licensed to do business in this state. Notwithstanding the fact that applicable statutes may exempt or exclude the successful Bidder from requirements that it be authorized and/or licensed to do business in this state, by submission of this signed Bid, the Bidder agrees to subject itself to the jurisdiction and process of the courts of the State of South Carolina and/or City of Hanahan, to all matters and disputes arising or to arise under the contract and performance thereof, including any questions as to the liability for taxes, licenses, or fees levied by the State.
- 2.9 <u>BIDDER'S QUALIFICATIONS</u>: Bidder must, upon request of the City, furnish satisfactory evidence of their ability to furnish products or services in accordance with the terms and conditions of this Bid. The Purchasing Department reserves the right to make the final determination as to the Bidder's ability to provide the services requested herein, before entering into any contract.
- 2.10 <u>BIDDER RESPONSIBILITY</u>: Each Bidder shall fully acquaint himself with conditions relating to the scope and restrictions attending the execution of the work under the conditions of this Bid. It is expected that this will sometimes require on-site observation. The failure or omission of a Bidder to acquaint himself with existing conditions shall in no way relieve him of any obligation with respect to this Bid or to the contract. The Bidder will be required to assume sole responsibility for the complete effort, as required by this Bid. The City will consider the Bidder to be the sole point of contact with regard to contractual matters.

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- 2.11 <u>ROYALTIES, PATENTS, NOTICES AND FEES</u>: Bidder shall give all notices and pay all royalties and fees. S/he shall defend all suits or claims for infringement of any patent rights and shall hold the City harmless from loss on account thereof, if any.
- 2.12 <u>CONFIDENTIALITY</u>: Contractor will maintain confidential any documents or information provided by the City and will not release, distribute or publish same to any third party without prior permission from the City, unless compelled by law or order of a court or regulatory body of competent jurisdiction. Such release will occur only after prior notice to the City.
- 2.13 OWNERSHIP OF MATERIAL: Ownership of all data, material, and documentation originated and prepared for the City pursuant to this contract shall belong exclusively to the City.
- 2.14 <u>WARRANTY</u>: Contractor warrants to City that all services and labor furnished to progress the work under this contract will be performed in accordance with the standard of care and diligence normally practiced by recognized firms of this type in performing services of a similar nature, free from defects which would not normally be found in work of this nature, and that the work will be of good quality, and in strict conformance with this contract. All work not conforming to these requirements may be considered defective.
- 2.15 <u>MATERIALS AND WORKMANSHIP</u>: Unless otherwise specified, all materials and workmanship shall be new and of the best grade of their respective kinds for the purpose. Whenever an article, material or equipment is specified by name, a substitute of equal qualifications may be used upon the written approval of the City.
- 2.16 <u>RELATIONSHIP OF PARTIES</u>: It is clearly understood that each party shall act in its individual capacity and not as an agent, employee, partner, joint venture, or associate of the other. An employee or agent of one party shall not be deemed or construed to be the employee or agent of the other party for any purpose whatsoever. Contractor is advised that taxes or social security payments shall not be withheld from a City payment issued hereunder and that Contractor should make arrangements to directly pay such expenses, if any.
- 2.17 <u>RIGHTS AND REMEDIES</u>: No provision in this document or in the Bidder's Bid shall be construed, expressly or by implication as a waiver by either party of any existing or future right and/or remedy available by law in the event of any claim or default or breach of contract. The failure of either party to insist upon the strict performance of any term or condition of the contract or to exercise or delay the exercise of any right or remedy provided in the contract, or by law, or the acceptance of materials or services, obligations imposed by this contract or by law, and shall not be deemed a waiver of any right of either party to insist upon the strict performance of the contract.
- 2.18 <u>CLIENT LITIGATION</u>: Contractor agrees to produce documents, witnesses and/or general assistance to any litigation, arbitration or mediation involving the City, if the City requests such documents, witnesses and/or general assistance. The City shall reimburse Contractor for all direct expenses incurred and time according to Contractor's rate schedule as of the date of the execution of the Final Agreement.

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- 2.19 <u>SEVERABILITY</u>: Should any section, paragraph, clause, phrase, or provision of any Final Agreement be determined invalid or held unconstitutional by a court of competent jurisdiction, such declaration shall not affect the validity of any Final Agreement as a whole or any part or provision thereof, other than the part so decided to be invalid or unconstitutional.
- 2.20 <u>INSURANCE REQUIREMENTS:</u> The successful bidder shall procure, maintain, and provide proof of insurance coverage for injuries to persons and/or property damage as may arise from or in conjunction with, the work performed on behalf of the City by the bidder, his agents, representatives, employees or subcontractors. Proof of coverage as contained herein shall be submitted prior to the commencement of work and such coverage shall be maintained by the bidder for the duration of the contract period; for occurrence policies, *if applicable*.
 - Worker's Compensation, which must meet the statutory requirements of the State of South Carolina
 - General Liability Coverage with bodily injury and property
 - Automobile Liability Coverage
- 2.21. <u>CONTRACTOR LICENSE REQUIREMENT</u>: The contractor shall procure all permits and licenses and pay all charges and fees necessary and incidental to the lawful conduct of his business. He shall keep himself fully informed of existing and future Federal, State, and Local Laws, ordinances and regulations which in any manner affect the fulfillment of his contract and shall comply with the same.
- 2.22 <u>CONTRACT</u>: The City reserves the option to prepare and negotiate a Final Agreement with the vendor, giving due consideration to the stipulations of the vendor's contracts and associated legal documents. Vendors should include with their submittal a copy of any proposed standard contract.
 - <u>The Final Agreement</u>, along with the provisions contained in <u>COH#-020821</u> and Vendor/Contractor's Response to <u>COH#-020821</u>, represents the <u>entire agreement</u> between the parties and supersedes any and all prior agreements, whether written or oral, that may exist between the parties regarding same.
- 2.23 <u>SUBCONTRACTORS</u>: No subcontract shall be made by the contractor with any other party for furnishing any of the services herein contracted for without the advance written approval of the City (please include with Bid a list and duties of any subcontractors). All subcontractors shall comply with Federal and State laws and regulations, which are applicable to the services, covered by the subcontractor and shall include all the terms and conditions set forth herein which shall apply with equal force to the subcontract, as if the subcontractor were the Contractor referred to herein. Contractor is responsible for contract performance whether or not subcontractors are used. The City reserves the right to reject any or all subcontractors and require substitution of a firm qualified to participate in the work as specified herein.
- 2.24. <u>CONTRACTOR LIABILITY</u>: The contractor assumes full responsibility for all injuries to, or death of any person and for all damage to property, including property and employees of the City and for all claims, losses or expense which may in any way arise out of the performance of

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the work, whether caused by negligence or otherwise; and the contractor shall indemnify and save the City harmless from all claims, losses, expense, or suits for any such injuries, death or damages to property, and from all liens, losses, expenses, claims or causes of action of any sort which may arise out of the performance of the work, and shall defend, on behalf of the City and suit brought against the City for attorney's fees and for all other expenses incurred by the City in connection with or as a result of any such suit, claims, or loss. Under no circumstances and

with no exception will City of Hanahan act as arbitrator between the contractor and any subcontractor. The contractor will be solely responsible for compliance with building code requirements, all dimensions, and all conditions relating to his work under this contract. Workmanship shall be first quality in every respect. All measures necessary to ensure a first-class job shall be taken.

- 2.24.1 Safety, Health, and Security: Contractor shall be solely responsible for its activities, that of its employees on the site and activities of its consultants, contractors and/or subcontractors for maintaining a safe job site. Contractor's activities and activities of its consultants, contractors and/or subcontractors shall comply with all local, state, and federal safety regulations and their enforcement agencies. Contractor shall at all times conduct its operations under any Final Agreement in a manner to avoid risk of endangerment to the health and safety of persons and property. The Contractor shall have sole responsibility for implementing its safety and health programs, taking all safety and health precautions necessary and continuously inspecting all equipment, materials and work to prevent, discover, determine and correct any conditions which might result in personal injury, equipment damage or damage to property or the public. Contractor's safety, health and security programs shall be in compliance with all regulatory requirements and shall furnish accident, incident, injury, and other records and reports required by the Occupational Safety and Health Administration, State and Local laws, or by the City. *If Applicable to this Bid Request*.
- 2.25 <u>ASSIGNMENT CLAUSE</u>: No contract or its provisions may be assigned, sublet, or transferred without the written consent of the City. The City is under no obligation to continue this contract with an assignee.
- 2.26 <u>RIGHT OF ENTRY</u>: The City will provide for the right of entry for Contractor, its subcontractors, and all necessary equipment in order to complete the work. Contractor agrees to be responsible for any damage to property that is caused by Contractor, its subcontractors and/or equipment and further agrees to take all necessary corrective action for any damage to property that is caused by Contractor, its subcontractors and/or equipment
- 2.27 <u>AUDIT</u>: Contractor's records which pertain to this Contract must be open for inspection and/or audit by the City upon request for a period of five years after each contract year. For audit purposes, the City must verify that the material cost billed as a result of the contract are correct. Contractor must provide the City, upon its request, documentation of material purchase costs (e.g. copy of invoice from its supplier), and rental equipment is being invoiced properly.
- 2.28 <u>PUBLIC RESPONSIBILITY</u>: The City has a duty to conform to applicable codes, standards, regulations and ordinances with regard to public health and safety. Contractor will at all times alert the City to any matter of which Contractor becomes aware and believes requires the City to issue a notice or report to certain public officials, or to otherwise conform with applicable codes, standards, regulations or ordinances. If the City decides to disregard Contractor's

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recommendations in these respects, Contractor shall employ its best judgment in deciding whether or not it should notify public officials.

- 2.29 <u>DRUG-FREE WORKPLACE</u>: Bidder shall comply with the South Carolina Drug-free Workplace Act, Section 44-107-10 et seq., South Carolina Code of Laws (1976, as amended) and shall file a certification form with City of Hanahan in accordance with the same. Aforesaid certification form is provided with this Request for Bids and shall be executed by the Bidder (or, in case of a corporation, by a duly authorized representative of the corporation) and become a part of the Bid. Bids submitted without this Certification may be rejected as nonresponsive.
- 2.30 <u>APPLICABLE LAW AND VENUE</u>: The construction, interpretation and performance of any Final Agreement shall be governed by and construed in accordance with the laws of the State of South Carolina and the City of Hanahan. The City and Contractor further agree that the Final Agreement shall be deemed to be made and performed in City of Hanahan, South Carolina. For the purposes of venue, all suits or causes of action arising out of the Final Agreement shall be brought in the courts of City of Hanahan, South Carolina.

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SECTION 3 SPECIAL INSTRUCTIONS

- 3.1 In addition to the other terms and conditions in this solicitation, as amended, the Bidder must agree to the inclusion of contractual articles provided below:
 - 3.1.1 <u>EQUAL EMPLOYMENT</u>: The Contractor will comply with all Federal and State requirements concerning fair employment. During the performance of this Contract, the Consultant agrees to provide equal employment opportunities. The Consultant will not discriminate against any employee or applicant for employment because of race, creed, color, sex, age, national origin, physical handicap, or marital status.
 - 3.1.2 <u>INDEMNIFICATION</u>: The contractor agrees to indemnify and hold harmless the City of Hanahan and all City officers, agents and employees from any and all claims, suits, actions, legal proceedings, damages, costs, expenses & attorney fees of every name and description, arising out of or resulting from the use of any materials furnished by the contractor, or any work done in the performance of the contract arising out of a willful or negligent act or omission of the provider, its officers, agents and employees; provided that such liability is not attributable to a willful or negligent act or omission on the part of the City, its officers, agents and employees.
 - ILLEGAL IMMIGRATION REFORM ACT COMPLIANCE: By submitting an offer, 3.1.3 Bidder certifies that it will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina code of Laws (originally enacted as Section 3 of The South Carolina Illegal Immigration act, 2008 S.C. Act No. 280) and agrees to provide upon request any documentation required to establish either: (a) the applicability of Title 8, Chapter 14 to Bidder and any subcontractor or sub-subcontractors; or (b) the compliance with Title 8, Chapter 14 by Bidder and any subcontractors or sub-subcontractors. Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony and, upon conviction, must be fined within the discretion of the court or imprisoned for not more than five years, or both". Bidder agrees to include in any contracts with its subcontractor's language requiring the subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14, and (b) include in any contracts with the sub-subcontractor's language requiring the sub-subcontract to comply with the applicable requirements of Title 8, Chapter 14. In the event any contractor, subcontractor and/or sub-subcontractor is found not to be in compliance with the SC Immigration Reform Act [hereinafter "The Act"], the contractor agrees to fully indemnify the City for any loss suffered by the City as a result of such contractor, subcontractor or sub-subcontractor's failure to comply with the Act.
 - 3.1.4 <u>FEDERAL, STATE AND LOCAL LAWS</u>: The contractor assumes full responsibility and liability for compliance with any and all local, state and federal laws and regulations applicable to Contractor and his employees including, but not limited to, compliance with

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the EEO guidelines, the Occupational Safety and Health Act of 1970, and minimum wage guidelines.

Contractor's professional services shall incorporate those federal, state and local laws, regulations, codes and standards that are applicable at the time Contractor rendered its services. Contractor shall not be responsible for any claim or liability for injury or loss allegedly arising from Contractor's failure to abide by federal, state or local laws, regulations, codes and standards that were not in effect or publicly announced at the time Contractor rendered its services

3.2 <u>RECEIPT OF BID</u>: Bidders mailing their bid submission must allow a sufficient mail delivery period to insure timely receipt of their Bids. Any Bids received **after** the scheduled opening date and time will be immediately disqualified and will be **returned un-opened**.

3.3 PREPARATION OF BID:

- 3.3.1 All Bids should be complete and carefully worded and must convey all information requested by City of Hanahan. If significant errors are found in the Bidder's submission, or if the Bid fails to conform to the essential requirements of the Bid request, City of Hanahan will be the judge as to whether that variance is significant enough to reject the Bid.
- 3.3.2 Bid should be prepared simply and economically, providing a straightforward, concise description of Bidder's capabilities to satisfy the requirements of this solicitation. Emphasis should be on completeness and clarity of content.
- 3.3.3 If your Bid includes any comment over and above the specific information requested in our Request for Bids, you are to include this information as a separate appendix to your Bid.

3.4 BID REQUIREMENTS:

3.4.1 Required Contents of Bid

Failure to respond to specific requirements may result in disqualification. Bidders are reminded that Bids will be considered exactly as submitted. Points of clarification will be solicited from proposers at the discretion of the City.

Those Bids determined not to be in compliance with provisions of this solicitation and the applicable law and/or regulations will not be processed. All costs incurred by the proposer associated with BID preparations and subsequent interviews and/or negotiations, which may or may not lead to execution of an agreement, shall be borne entirely and exclusively by the proposer.

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The information and proposed budget for the contractor selected will form the basis for negotiation of a contract. The City reserves the right to issue a contract without further negotiation using the data contained in the Bid submission.

3.4.2 Bid Format

The Bid format requirements were developed to aid Bidders in their Bid development. They also provide a structured format, so reviewers can systematically evaluate several Bids. These directions apply to all Bids submitted.

The purpose of the Bid is to demonstrate the qualifications, service level, and cost for services, competence and capacity of the firms seeking to become a provider of record for the City. The Bidder's submission should address all the points outlined here as required.

- 3.4.2.1 Transmittal Letter: The transmittal letter must include:
 - Name of the firm responding, including mailing address, telephone number, fax number and email address.
 - The name of the person or persons authorized to make representations on behalf of the Bidder, binding the firm to a contract or Agreement.
 - A statement that the offer submitted as a result of this solicitation is binding on the Bidder for ninety (90) calendar days following the Bid due date.
 - Signed by authorized person.
- 3.4.2.2 <u>Firm History and Experience</u>: Define the overall structure of the firm to include the following:
 - A description of the firm's principal business location, including the primary office that will service the City.
 - Licenses and Certificates held by you and/or your company
 - Discuss any impending changes in your organization that could impact the delivery of services, if any.
 - Indicate current responsibilities of person designated to serve as lead contact for the City.
 - Three references

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BID SCOPE

Project Title: BUNKER GEAR

PROJECT DISCRIPTION and BID SPECIFICATIONS for LEASE | PURCHASE

Scope and specifications will be attached as Exhibit A and incorporated into this document.

BID REQUIREMENTS:

Bids <u>must</u> be submitted in **sealed** envelope. The vendor name, opening date, and complete project name <u>must</u> appear legibly on the outside of the envelope. Bids will be accepted until the date and time of opening. **Irrevocable Bid Period**: Bids are irrevocable for a period of 60 calendar days after the bid deadline unless the Facility consents to a different time period. The City of Hanahan Fire Department and/or The City of Hanahan reserves the right to accept or reject any or all bids.

A vendor information sheet must be attached unless on file with The City of Hanahan.

DUE DATE:

Bids must be submitted by February 25, 2021 - 2 P.M EST. [Eastern Standard Time].

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- 3.5 <u>AWARD</u>: An award resulting from this request shall be made to the responsive and responsible Bidder whose Bid is determined to be <u>most advantageous</u> to City of Hanahan, taking into consideration cost and any additional evaluation criteria. However, the City reserves the right to reject any and all Bids received and, in all cases, City of Hanahan will be the sole judge as to whether a Bidder's submission has 0.or has not satisfactorily met the requirements of this BID.
- 3.6 <u>EVALUATION</u>: The evaluation team will decide if they need additional information on the top Bids submitted; if so, the Bidders will be contacted.

3.6.1 General:

- 3.6.1.1 The City may shortlist the Bidders based upon responses. If necessary, the City may conduct interviews. The City will not be liable for costs incurred for preparation of bid submission and accompanying documentation.
- 3.6.1.2 The City reserves the right to make such additional investigations as it deems necessary to establish the competency and financial stability of any firm submitting a Bid.
- 3.6.1.3 Exceptions to Contract Terms and Requirements: Bidder shall clearly identify any proposed <u>deviations</u> from the Contract Terms/Requirements/Scope of Work in the Request for Bids. Each exception must be clearly defined. The exception shall include, at a minimum, the Bidder's proposed substitute language and opinion as to why the suggested substitution will provide equivalent or better cost Oand/or performance. If no exceptions are noted in the Bidder's submission, the City will assume complete conformance with the Requirements/Scope of Work and the successful Bidder will be required to perform accordingly. Alternate written Bids submitted may be considered; however, the City will make final determination as to suitability and compliance with the scope of work. Bids submitted not meeting all requirements might be rejected.
- 3.7 <u>EVALUATION CRITERIA</u>: The following evaluation criteria will be taken into consideration for purposes of Bid evaluation. The evaluation team during evaluation will take the following criteria listed in relative order of importance, into consideration.

LOWEST RESPONSIBLE BID – BASED ON COMPLIANCE, RESPONSIVNESS AND COST.

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SECTION 4 BID TRANSMITTAL AND AGREEMENT

The undersigned, having fully familiarized himself with the information contained within this Request for Bids, (including the Invitation Notice, Instructions to Bidders, General Conditions, Special Conditions (if applicable), Requirements, Local Preference Statement, Bid Sheets, Drug-Free Workplace Certification Form, Affidavits of Bidder, and subsequently received written Amendment as listed below), submit the attached Bid. I verify (to the best of my knowledge and belief) this Bid to be true and correct. All requirements of the Request for Bids are hereby incorporated into the Bid submitted and shall be incorporated by reference into the purchase contract or act as the Contract.

The Bidder acknowledges the following Amendments (if applicable), have been received and incorporated into this Bid (if applicable):

Amendment No	Dated,	Signature
Amendment No	Dated,	Signature
Amendment No	Dated,	Signature
Respectfully submitted by:		
		(FIRM NAME)
Representative Name:		
Title:		
Address:		
Date:		
Telephone No:		
Fax Number:		
Email:		

SECTION 5 BID FORM

[NAME OF BID]		
(This may be submitted in a separate sheet if neces		
BID FORM		
This information can be included with your bid on a s	eparate sheet.	
TOTAL PROJECT PRICE = \$		
COMPANY NAME:		
ADDRESS:		
CITY:	STATE:	
PHONE:		
EMAIL:		
REPRESENTATIVE NAME:		
SIGNATURE:	DATE:	

**Complete this form and return to the City of Hanahan 1255 Yeamans Hall Rd. Hanahan, SC 29410 by 2:00 p.m. February 25, 2021 in a sealed separate envelope marked "Bunker Gear – Price Proposal Signature serves as agreement [if winning bidder]. Incomplete forms shall not be considered for selection. The City of Hanahan reserves the right to reject any and/or all bids.

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DEVIATIONS FROM REQUIREMENTS

Please list all deviations from requirements in the space provided below. Please note item number for which you are showing deviations.

<u>ITEM NO</u> .	DEVIATIONS	
	Company Name	Signature of Authorized Representative

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ATTACHMENT #1 NONCOLLUSION AFFIDAVIT OF BIDDER

STA	TE OF)	
CIT	Y OF)	
	, being first duly sworn, deposes and says that:	
(1)	He is (owner, partner, officer, representative or agent) of, the Bidder that has submitted the attached Bid:	
(2)	He is fully informed regarding the preparation and contents of the attached Bid and of all pertiner circumstances regarding such Bids:	
(3)	Such Bid is genuine and is not a collusive or sham Bid;	
(4)	Neither the said Bidder not any of its officers, partners, owners, agents, representatives, employee or parties in interest, including this affidavit, has in any way colluded, conspired, connived or agreed directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid is connection with the Contract for which the attached Bid has been submitted or to refrain from quoting in connection with such Contract, or has in any manner directly or indirectly, sought be agreement or collusion or communication or conference with any other Bidder, firm or person to fit the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or conference with any other Bidder, or to secure through any collusion conspiracy, connivance or unlawful agreement any advantage against the City of Hanahan, Sout Carolina, or any person interested in the proposed contract; and	
(5)	The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents representatives, owners, employees, or parties in interest, including this affidavit.	
SIG	NED:	
TIT	LE:	
Sub	scribed and sworn to before me this day of, 2017.	
	My Commission Expires	
	Notary Public	

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ATTACHMENT #2 CITY OF HANAHAN DRUG-FREE WORKPLACE CERTIFICATION FORM

(BIDDER/VENDOR OTHER THAN INDIVIDUALS)

This certification is required by the Drug-Free Workplace Act, Section 44-107-10 et seq. South Carolina Code of Laws (1976, as amended). The regulations require certification by Bidder/Vendor prior to award that they will maintain a drug-free workplace as defined below. The certification set out below is a material requirement of fact upon which reliance will be placed when determining the award of a Contract. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of Contract, or suspension or debarment from the right to submit bids or Bids for City of Hanahan projects.

For purposes of this Certification "Drug-Free Workplace" is defined as set forth in Section 44-107-20 (1), South Carolina Code of Law (1976, as amended). The aforesaid Section defines workplace to include any site where work is performed to carry out the Bidder's/Vendor's duties under the Contract. Bidder's/Vendor's employees shall be prohibited from engaging in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in accordance with the requirements of the Drug-Free Workplace Act.

By signing this document, the Bidder/Vendor hereby certifies that it will provide a drug-free workplace by:

- 1. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Contractor's/Vendor's workplace and specifying the actions that will be taken against employees for violation of the prohibition;
- 2. Establishing a drug-free awareness program to inform employees about:
 - 2.1. The damages of drug abuse in the workplace;
 - 2.2 The Bidder's/Vendor's policy of maintaining a drug-free workplace;
 - 2.3 Any available drug counseling, rehabilitation, and employee assistance programs; and
 - 2.4 The penalties that may be imposed upon employees for drug violations.
- 3. Making it a requirement that each employee to be engaged in the performance of the Contract be given a copy of the statement required by paragraph #1 above;

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- 4. Notifying the employee in the statement required by paragraph #1 that, as a condition of employment under the Contract, the employee will:
 - 4.1. Abide by the terms of the statement; and
 - 4.2. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after the conviction.
- 5. Notifying the using agency within ten (10) days after receiving notice under subparagraph #4-b, from an employee or otherwise receiving actual notice of the conviction.
- 6. Taking one of the following actions, within thirty (30) days of receiving notice under subparagraph #4-b with respect to any employee who is convicted:
 - 6.1. Taking appropriate personnel action against the employee up to and including termination; or
 - 6.2. Requiring the employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.
- 7. Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraph #1, 2, 3, 4, 5, and 6 above.

FIRM NAME:		
ADDRESS:		
ATTEST:	SIGNED:	
DATE:	TITLE:	

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ATTACHMENT #3 REFERENCES

As per the Bid Requirements, provide a list of at least three (3) customer references including company name, address, contact person, telephone number. (Note: only list those customers in which a similar type of equipment/product and scope of work/service was provided – preferably in South Carolina, North Carolina or Georgia).

1.	Company Name:
	Address:
	Business Phone #:
	Contact Person:
	Email:
2.	Company Name:
	Address:
	Business Phone #:
	Contact Person:
	Email:
3.	Company Name:
	Address:
	Business Phone #:
	Contact Person:
	Email:

END

EXHIBIT "A"

GENERAL SPECIFICATIONS PROTECTIVE JACKET FOR STRUCTURAL FIRE FIGHTING CITY OF HANAHAN – FIRE DEPARTMENT

SCOPE

This specification details design and materials criteria to afford protection to the upper and lower body, excluding head, hands, feet, against adverse environmental effects during structural firefighting. All materials and construction will meet or exceed NFPA Standard #1971 and OSHA for structural fire fighters protective clothing.
ComplyException
OUTER SHELL MATERIAL - JACKETS
The "PBI GEMINI® XT MATRIX TM " (a.k.a. PBI® XT) outer shell, trade name Gemini XT shall be manufactured by TENCATE and constructed of 60/40 Kevlar®/PBI [™] modified plain weave outer shell fabric featuring a patented high tech grid of composite filament & spun yarns in a "Matrix Technology" with an approximate weight of 7.5 oz. per square yard. The shell material must be treated with SST□ (SUPER SHELLTITE) which is a durable water-repellent finish that also enhance abrasion resistance. Color of the garments shall be black. Bids offering a 600 denier Matrix product and/or the Matrix shell without the SST□ will not be considered.
ComplyException
THERMAL INSULATING LINER - JACKET
The thermal liner shall be constructed of TENCATE "CALDURA® ELITE SL2i"; with an approximate weight of 7.7 oz. per square yard. This thermal liner consists of one layer of 1.5 oz. and one layer of 2.3 oz. per square yard Nomex® E-89™ spunlaced Nomex®/Kevlar® aramid blend, quil stitched to a Kevlar® filament and FR rayon/para-aramid/nylon inherently wicking Caldura® face cloth. The thermal liner shall be attached to the moisture barrier and bound together by bias-cuneoprene coated cotton/polyester around the perimeter. This provides superior abrasion resistance to the less expensive, less durable, "stitch and turn" method. Further mention of "Thermal Liner" in this specification shall refer to this section.
ComplyException

MOISTURE BARRIER - JACKETS

The moisture barrier material shall be STEDFAST "STEDAIR® 3000" ePTFE moisture barrier is
engineered using an E-89 TM substrate and BHA Technologies ePTFE membrane. The Stedair
bicomponent ePTFE membrane is a combination of microporous and monolithic technologies. The
moisture barrier material shall meet all moisture barrier requirements of NFPA 1971 edition, which
includes water penetration resistance, viral penetration resistance and common chemical penetration
resistance. The moisture barrier shall be sewn to the thermal liner at the edges only and bound with
bias-cut neoprene-coated cotton/polyester binding. Further mention of "Specified Moisture Barrier"
in this specification shall refer to this section.
Comply Exception
CompryException
SEALED MOISTURE BARRIER SEAMS

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

Comply	Exception

METHOD OF THERMAL LINER/MOISTURE BARRIER ATTACHMENT FOR **JACKETS**

The thermal liner and moisture barrier shall be completely removable from the jacket shell. Two strips of 5/8 inch wide FR hook and loop fastener tape shall secure the thermal liner/moisture barrier to the outer shell along the length of the neckline under the collar (see Collar section). The remainder of the thermal liner/moisture barrier shall be secured with snap fasteners appropriately spaced on each jacket facing and Are-Shield® snap fasteners at each shell sleeve end. There shall be one Ara-shield® snap tab in the liner in addition to snap fasteners to correspond with color coded snap tabs for ease of matching the liner system to the outer shell after inspection or cleaning is completed.

THERMAL PROTECTIVE PERFORMANCE

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

_Exception

STITCHING

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

____Comply ____Exception

JACKET CONSTRUCTION

BODY

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

____Comply ____Exception

SIZING

The jacket length shall be measured from the juncture of the collar and back panels to the hem of the jacket and shall measure

- 27 inches in the front/31 inches long in the back. (women's)
- 29 inches in the front/33 inches long in the back. (standard)
- 32 inches in the front/36 inches long in the back.
- 35 inches in the front/39 inches long in the back.

The jacket shall be available in male and female patterns in even size chest measurements of two-inch increments and shall range from a small size of 30 to a large size of 68. Generalized sizing, such as small, medium, large, etc., will not be considered acceptable.

____Comply ____Exception

DRAG RESCUE DEVICE (DRD)

A Firefighter Drag Rescue Device (DRD) shall be installed in each jacket. The ends of a 1-inch wide strap, constructed of Kevlar[®], shall be sewn together to form a continuous loop. The strap shall be installed in the jacket between the liner system and outer shell such that when properly installed will loop around each arm. The strap will be accessed through a portal between the shoulders on the upper back where it is secured in place by an FR strap. The DRD shall be removable for laundering. The access port shall be covered by an outside flap of shell material, designed to fit between the shoulder straps of an SCBA. The flap will have a 3M ScotchliteTM R/O reflective triple trim sewn to the outside to clearly identify the feature as the DRD (Drag Rescue Device). The DRD shall not extend beyond

the outside flap. This device provides a quickly deployed means of rescuing a downed firefighter. Flimsy, rope-style DRD straps will not be considered.
ComplyException
LINER ACCESS OPENING - JACKET
The liner system of the jacket shall incorporate an opening at the leading edges of the right front panel. This opening shall run a minimum of 11 inches for the purpose of inspecting the integrity of the jacket liner system. When installed into the outer shell the Liner Access Opening will be covered and protected by the overlap of the outer shell facing.
ComplyException
LOGOS
The garment brand shall be identified by means of FR Nomex thread embroidery on the top of the left collar denoting "GLOBE" as the manufacturer.
ComplyException
RETROREFLECTIVE FLUORESCENT TRIM
The retroreflective fluorescent trim shall be lime/yellow Reflexite [®] Brilliance [®] with stripe. Each jacket shall have an adequate amount of retroreflective fluorescent trim affixed to the outside of the outer shell to meet the requirements of NFPA #1971 and OSHA. The trim shall be in the following widths and shall be
NYC style ; 3-inch-wide stripes - around the bottom of the jacket within approximately 1 inch of the hem, around the back and chest area approximately 3 inches below the armpit, around each sleeve below the elbow, around each sleeve above the elbow.
ComplyException
REINFORCED TRIM STITCHING

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

	Comply	Exception	
SEWN ON RETROREFLE	CTIVE LETTERIN	\mathbf{G}	
Each jacket shall have 3" HANAHAN	lime/yellow Reflexit	e [®] Brilliance [®] lettering	on Row "A" reading:
	Comply	Exception	
LETTER PATCH			
Hanging Letter Patch The Hanging letter patch shall patch will attach to the rear in hook and loop fastener tape.		•	
Each hanging letter patch shaname.	all have 3" lime/yello	ow Reflexite® Brilliance	® lettering with the FF's
	Comply	Exception	

COLLAR & FREE HANGING THROAT TAB

The collar shall consist of a minimum four-layer construction and be of one-piece design. The outer layers shall consist of one layer of specified outer shell material on outside and a layer of PCA black AdvanceTM as standard on the inside and two layers of a moisture barrier. The rear inside ply of aramid pajama check shall be sewn to the collar's back layer of outer shell at the edges only. The forward inside ply of moisture barrier shall be sewn to the inside of the collar at the edges only. The multi-layered configuration shall provide protection from water and other hazardous elements. The collar shall be a minimum of 3 inches high and graded to size. The leading edges of the collar shall extend up evenly from the leading edges of the jacket front body panels so that no gap occurs at the throat area. The collar's back layers of outer shell and moisture barrier shall be joined to the body panels with two rows of stitching. The collar's front layers of moisture barrier and outer shell shall have a strip of 5% inch wide FR hook fastener tape stitched to the inside lower edge and running the full length of the collar. The inside strip of 5% inch wide FR hook fastener tape sewn to the underside of the collar shall engage a corresponding piece of FR loop fastener tape on the neck extension of the liner system. A self-material fabric hanger loop shall be sewn at the top of collar.

The throat tab shall consist of a minimum 4-layer construction and it shall be of be a scoop type design and constructed of two plies of outer shell material with two center plies of moisture barrier material. The throat tab shall measure not less than $3\frac{1}{2}$ inches wide at the center tapering to approximately 2 inches at each end with a total length of approximately 9 inches. The throat tab will be attached to the right side of the collar by a 1 inch wide by $1\frac{1}{2}$ inch long piece of Nomex[®] twill webbing. The throat tab shall be secured in the closed and stowed position with FR hook and loop fastener tape. The FR hook and loop fastener tape shall be oriented to prevent exposure to the environment when the throat tab is in the closed position. A $1\frac{1}{2}$ inch by 3-inch piece of FR loop fastener tape shall be sewn horizontally to each end of the throat tab and a 1 inch by 3-inch piece of FR hook fastener tape shall

be sewn horizontally to the throat tab. A corresponding piece of FR hook fastener tape measuring 1 inch by 3 inches shall be sewn horizontally to the leading outside edge of the collar on the left side, for attachment and adjustment when in the closed position and wearing a breathing apparatus mask. The collar closure strap shall fold in half for storage with the FR loop fastener tape engaging the FR hook fastener tape.

_____Comply
____Exception

JACKET FRONT

The jacket shall incorporate separate facings to ensure there is no interruption in thermal or moisture.

The jacket shall incorporate separate facings to ensure there is no interruption in thermal or moisture protection in the front closure area. The facings shall measure approximately 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 jacket facings and configured such that it is sandwiched between the jacket facing and the inside of the respective body panel. The breathable film side shall face inward to protect it. There shall be wicking barrier constructed of a moisture barrier material installed on the front closure system on the left and right side directly below the front facings to ensure continuous protection and overlap. The wicking barrier shall extend no more than a maximum of ¾ inch beyond the inner facing and false facing shall be unacceptable. The thermal liner and moisture barrier assembly shall be attached to the jacket facings by means of snap fasteners.

____Comply ____Exception

STORM FLAP

A rectangular storm flap measuring approximately 3½ inches (6 inches for hook and dee inside/FR hook and loop fastener tape outside closure; aka #7C) wide and a minimum of 21 inches long shall be centered over the left and right body panels to ensure there is no interruption in thermal or moisture protection in the front of the jacket. The outside storm flap shall be constructed of two plies of outer shell material with a center ply of breathable moisture barrier material. The outside storm flap shall be double stitched to the right-side body panel and shall be reinforced at the top and bottom with backtacks.

____Comply ____Exception

STORM FLAP AND JACKET FRONT CLOSURE SYSTEM

The jacket shall be closed by means of a 20-inch size #10 heavy duty high-temp smooth-gliding YKK Vislon® zipper on the jacket fronts and FR hook and loop fastener tape on the storm flap. The teeth of the zipper shall be mounted on black Nomex® tape and shall be sewn into the respective jacket fronts. The storm flap shall close over the left and right jacket body panels and shall be secured with FR hook and loop fastener tape. A 1½ inch piece of FR loop fastener tape shall be installed along the leading edge of the storm flap on the underside with four rows of stitching. A corresponding 1½ inch piece of FR hook fastener tape shall be sewn with four rows of stitching to the front body panel and positioned to engage the loop fastener tape when the storm flap is closed over the front of the jacket.

ComptyException
SEMI-EXPANSION (BELLOWS) POCKETS
Each jacket front body panel shall have an 8-inch-wide by 8-inch-high semi-expansion pocket double stitched to it and shall be located to provide accessibility. The leading edge of the pockets shall be sewn flush with the jacket. The rear of the pockets shall expand to a depth of 2 inches. <i>The semi-expansion pocket shall be reinforced with a layer of Kevlar® approximately 5 inches up on the inside of the pocket</i> . Two rust resistant metal drain eyelets shall be installed in the bottom of each semi-expansion pocket to facilitate drainage of water. The pocket flaps shall be constructed of two layers of outer shell material and shall measure approximately 3 inches deeper than the pocket expansion and ½ inch wider than the pocket. The pocket flaps shall be angled with the front edge 1" shorter than the back edge, the upper pocket corners shall be reinforced with proven backtacks, and pocket flaps shall be reinforced with backtacks. The pocket flaps shall be closed by means of FR hook and loop fastener tape. Two pieces of 1½ inches by 3-inch FR hook fastener tape shall be installed vertically on the inside of each pocket flap (one piece on each end). Two corresponding pieces of 1½ inches by 3-inch FR loop fastener tape shall be installed horizontally on the outside of each pocket near the top (one piece on each end) and positioned to engage the hook fastener tape. Additionally, a separate hand warmer pocket compartment will be provided under the expandable cargo pocket. This compartment will be accessed from the rear of the pocket and shall be lined with Nomex® fleece for warmth and comfort.
ComplyException
EXPANSION POCKET REINFORCEMENTS
The lower half of the expansion pockets shall be reinforced on the outside with a layer of black Dragonhide® material. The pocket flaps shall be constructed of Dragonhide material and have Silizone sewn into the edge of the pocket flaps to be easier to grab with a gloved hand.
ComplyException
A NUMBER OF THE PROPERTY OF TH

Comply

Expontion

AXTION® SLEEVES

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

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

	_Comply	Exception
SLEEVE CUFF REINFORCEM	ENTS	
The sleeve cuffs shall be reinforced	with black suede	e leather.

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

____Comply ____Exception

WRISTLETS / SLEEVE WELLS

Each jacket shall be equipped with **Nomex**® **knit wristlets with thumb loop** not less than 4 inches in length and of double thickness. Nomex® knit is constructed of 96% Nomex® and 4% Spandex for shape retention. A loop of ½ inch wide black 6.0 oz. Brigade material shall be installed on each wristlet. This loop is designed to slip over the thumb and hold the wristlets from riding up the arm. The color of the wristlets shall be white.

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

____Comply ____Exception

LINER SHOULDER THERMAL ENHANCEMENT

A minimum of one additional layer of thermal liner material shall be used to increase thermal insulation in the shoulder area of the liner system. This thermal enhancement layer shall drape over the top of each shoulder extending from the collar to the sleeve/shoulder seam, and 5 inches to the front, 2 inches to the back of the shoulder cap. The shoulder thermal enhancement layers shall be sandwiched between the thermal liner and moisture barrier layers of the liner system and shall be stitched to the thermal liner layer only. The thermal enhancement layer shall have finished edges by means of overedging. Raw or unfinished edges shall be considered unacceptable. Thermal scraps

shall not be substituted for full-cut fabric padding. Smaller CCHR reinforcements shall not be

considered acceptable since they provide far less area of coverage.

RADIO POCKET

Each jacket shall have a pocket designed for the storage of a portable radio. This pocket shall be of box type construction, double stitched to the jacket and shall have one drainage eyelet in the bottom of the pocket. The pocket flap shall be constructed of two layers of outer shell material measuring approximately 3 inches longer than the depth of the pocket and approximately ½ inch wider than the pocket. The pocket flap shall be closed by means of FR hook and loop fastener tape. A ½ inch by 3-inch piece of FR hook fastener tape shall be installed on the inside of the pocket flap beginning at the center of the bottom of the flap. A ½ inch by 3-inch piece of FR loop fastener tape shall be installed horizontally on the outside of the pocket near the top center and positioned to engage the hook fastener tape. In addition, the entire inside of the pocket shall be lined with neoprene coated cotton/polyester material to ensure that the radio is protected from the elements. The impermeable barrier material shall also be sandwiched between the two layers of outer shell material in the pocket flap for added protection. The radio pocket shall measure approximately 3 inches deep by 3.5 inches wide by 9 inches high and shall be installed on the left chest.

Note: radio pocket 6-inch and over in height requires trim.

Note: Radio pockets on the sleeves will be fully lined with neoprene to comply with the NFPA 2013 Stored Energy Test.

_____Comply

____Exception

MICROPHONE STRAP

A strap shall be constructed to hold a microphone for a portable radio. It shall be sewn to the jacket at the ends only. The size of the microphone strap shall be 1-inch x 3 inches.

One microphone strap shall be mounted above the radio pocket.

One on the collar on the left side.

One on the collar on the right side.

Each strap shall be constructed of double layer outer shell material.

_____Comply

____Exception

SURVIVOR FLASHLIGHT HOLDER

Each jacket shall be equipped with a "Survivor" flashlight holder. An inward facing safety hook, attached to a double layer self-material strap, shall be double stitched in a vertical position to the upper chest. The inward facing safety hook will accommodate the clip portion of the flashlight. Below the safety hook will be a strap constructed of outer shell material measuring approximately 1 ¾ inches high and 9 inches wide and will hold the barrel of the flashlight. The lower strap will be equipped

MOISTURE BARRIER - PANTS

The moisture barrier material shall be STEDFAST "STEDAIR® 3000" ePTFE moisture barrier is engineered using an E-89TM substrate and BHA Technologies ePTFE membrane. The Stedair bicomponent ePTFE membrane is a combination of microporous and monolithic technologies. The moisture barrier material shall meet all moisture barrier requirements of NFPA 1971, which includes h

water penetration resistance, viral penetration resistance and common chemical penetration resistance. The moisture barrier shall be sewn to the thermal liner at the edges only and bound with bias-cut neoprene-coated cotton/polyester binding. Further mention of "Specified Moisture Barrier" in this specification shall refer to this section.
ComplyException
SEALED MOISTURE BARRIER SEAMS
All moisture barrier seams shall be sealed with a minimum 1-inch wide sealing tape. One side of the tape shall be coated with a heat activated glue adhesive. The adhesive side of the tape shall be oriented toward the moisture barrier seam. The adhesive shall be activated by heat and the sealing tape shall be applied to the moisture barrier seams by means of pressure exerted by rollers for that purpose.
ComplyException
METHOD OF THERMAL LINER/MOISTURE BARRIER ATTACHMENT FOR PANTS
The thermal liner and moisture barrier shall be completely removable from the pant shell. Nine snap fasteners shall be spaced along the waistband to secure the thermal liner to the shell. The legs of the thermal liner/moisture barrier shall be secured to the shell by means of Ara-Shield® snap fasteners, 2 per leg. The Ara-shield® snap tabs on the shell shall be color coded to corresponding color coded snap tabs in the liner for ease of matching the liner system to the outer shell after inspection or cleaning is completed. There shall be no hook and loop used to close the liner access opening.
ComplyException
THERMAL PROTECTIVE PERFORMANCE
The assembled garment, consisting of an outer shell, moisture barrier and thermal liner, shall exhibit a TPP (Thermal Protective Performance) rating of not less than 35.
ComplyException
STITCHING

The outer shell shall be assembled using stitch type #301, #401, #514 and #516. The thermal liners and moisture barriers shall be assembled using stitch type #301, #401, #504, #514, and #516. Major A outer shell structural seams and major B structural liner seams shall have a minimum of 8 to 10

stitches per inch. All major A continuously stitched only.	seams shall be sewn	with ball point needles only.	All seams shall be
continuously stitemed only.	Comply	Exception	
SIZING			
<u> </u>	-	ment can safely perform to the ants shall be available in all siz	
Pants:			
Gender: Waist:	Gender specific Mer Even sizes	n's and Women's patterns	
Body Shape:	Men's Regular, Rela	axed and Slim	
, 1	Relaxed is a fuller co	ut in the hips and thighs, like re ut in the hips and thigh, like str	· ·
Inseam:	Even sizes		
Pants available in only one or	two standard shapes	will not be acceptable.	
	Comply	Exception	
PANT CONSTRUCTION			
BODY			
and two back panels. The bobody movement and shall be j body panels, there shall be a s bulk, comfort and more freedo	dy panels shall be shounded by double stitch eamless, one-piece crom of movement in the	eparate body panels consisting apped to provide a tailored fit, hing with Nomex® thread. In a totch gusset. The one-piece guis high stress area. The body paccurate fit in a broad range of s	thereby enhancing addition to the four sset allows for less anels, seam lengths
area. This is accomplished by beginning at the knee. The s	rolling the side leg se light taper will preve	ody panels to provide more full ams (inside and outside) to the ent premature wear of the side in areas encountered on the side	rear of the pant leg seams by pushing
	Comply	Exception	
CONTOURED SADDLE			

The rise of the rear pant center back seam, including gusset, from the top back of the waistband to where it intersects the inside leg seams at the crotch shall exceed the rise at the front of the pant by approximately 8 inches. The longer rear center back seam provides added length in the seat for

mobility without restriction when stepping up, kneeling, or crawling and maintains proper alignment of the knee, without twisting, directly over the kneepads when kneeling and crawling.
ComplyException
LINER ACCESS OPENING (PANT)
The thermal liner and moisture barrier layers of the pant liner system shall be constructed in such a way as to allow an access opening for interior inspection, service and replacement. The thermal liner and moisture barrier layers shall be stitched together for security and prevention of inadvertent use of one layer without the other. The liner system shall have a reinforcement material sewn to the bottom of the fly opening. This reinforcement will serve to prevent the liner from tearing in that area from the constant donning and doffing of the pants.
The liner system of the pant shall incorporate an opening along the back of the waistline for ease in inspecting the inner layers and to facilitate performing the complete Liner Inspection. The thermal liner and moisture barrier shall be individually bound with a neoprene coated bias cut tape and joined on each of the front panels, along the waistband from the front fly opening to side seam. The back of the liner system will be allowed to remain open with two snaps on either side of the back seam to attach the moisture barrier layer to the thermal liner layer. As described previously, the pant thermal layer system snaps directly to the independent waistband by means of nine snap fasteners. There shall be no hook and loop used to close the liner access opening.
ComplyException
RETROREFLECTIVE FLUORESCENT TRIM
The pants shall have a stripe of retroreflective fluorescent trim encircling each leg below the knee to comply with the requirements of NFPA #1971 in 3-inch lime/yellow Reflexite [®] Brilliance [®] with stripe. The Pants will also have Trim placed vertically down the side of the pant from waist to cuff following the seam of the pant.
Bottom of trim band shall be located approximately 3" above cuff.
ComplyException
REINFORCED TRIM STITCHING

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

and providing more value and a longer service life. Two rows of stitching used to attach the trim in place of the TrimTrax® shall be considered an unacceptable alternative, since it has been proven that the two rows of stitching have insignificant impact on wear life. All trim ends shall be securely sewn into a seam for a clean finished appearance.

Comply	Exception
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ELASTICIZED WAISTBAND

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

The waist area of the pants shall be reinforced on the inside with a separate piece of black aramid outer shell material, cut on the bias (diagonally). The reinforcement shall be folded in half, for a finished bottom edge and shall have a finished width of not less than approximately 1½ inches. The top edge of the waistband reinforcement shall be double stitched to the outer shell at the top of the pants. The lower edge of the waistband shall be unattached to the shell to accept the thermal liner and moisture barrier. The top of the thermal liner and moisture barrier shall be secured to the underside of the waistband reinforcement by means of nine snaps, spaced equidistant along the length of the waistband reinforcement. Inserting the liner system between the waistband reinforcement and outer shell serves to reduce the possibility of liner detachment while donning and doffing. The independent waistband construction affords greater comfort and fit than a turned and stitched method. Pants that do not include an independent waistband or are not cut on the bias will not provide the same amount of stretch to the garment and shall be considered unacceptable.

Comply	Exception
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EXTERNAL / INTERNAL FLY FLAP

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

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

The fly shall also have a zipper.		
	Comply	Exception

BLACK ARAMID BELT WITH BELT LOOPS

If the GLOBE PANT SYSTEM IH Pant is ordered with either an Escape Belt or a Harness, that belt shall be installed as the positive pant closure. If neither an Escape Belt nor a Harness is specified, the GLOBE PANT SYSTEM IH Pant shall include an approximate 2-inch wide belt constructed of aramid webbing material with an adjustable hi-temp thermoplastic Delrin buckle serving as the exterior primary positive locking closure. This buckle shall also provide a quick-release mechanism for donning and doffing.

The pants shall be equipped with a series of belt loops, spaced around the waist to accommodate an Escape Belt, a Harness or the aramid belt. One loop shall be located on the rear of the waist, centered over the rear seam, measuring approximately $3\frac{1}{2}$ inches by $3\frac{1}{2}$ inches. There shall be two additional wide loops at the front of each pant. The top of these two belt loops shall be angled, with the top measuring approximately $2\frac{1}{2}$ inches and the bottom measuring approximately $4\frac{1}{2}$ inches. Under each of the front belt loops there shall be a slit to accommodate an internal harness passing from the inside of the pant, to the outside. The slits shall be at the same angle as the front belt loops, reinforced with black Ara-Shield® material, and having an opening that measures approximately 3 inches.

There shall be 2-piece loops constructed of a double layer of black aramid material installed inside the shell in the hip area, which shall serve to hold the leg loops of an optional internal harness in place. The top and bottom of the loops shall attach to each other with an approximate 1 inch by 1-inch FR hook and loop fastener tape sew to the ends.

In addition to the 3 wide belt loops, there shall be two rappelling harness loops installed at the rear of the pant, just behind each side seam. The loops shall be constructed of a double layer of outer shell material and shall be of a 2-piece design – top and bottom. The top and bottom of each loop shall attach to each other with snap fasteners and FR hook and loop fastener.

CARABINER HOLD DOWN STRAP

The GLOBE PANT SYSTEM IH pant shall be equipped with a carabiner hold down strap. The strap shall be constructed of double layer black Ara-Sheild® material, consisting of two separate portions to form a strap with an opening of approximately 3 inches. Each portion of the strap shall measure approximately 1¾ inches wide by 3½ inches long. The lower portion of the strap shall be double needle stitched in the vertical position, opening upwards. There shall be a piece of 1½ by 2½ inch hook FR fastener tape single needle stitched to the strap approximately ¼ inch up from the bottom. The upper portion of the strap shall be double needle stitched in the vertical position, opening downwards to interface with the lower portion of the strap. There shall be a piece of corresponding 1½ by 2½ inch loop FR fastener tape single needle stitched to the strap approximately ½ inch down from the top of the strap. On both the upper and lower portions of the strap, there shall

be a bartack centered between the double needle stitching. The strap shall be located behind the left front belt loop.

In the event the GLOBE PANT SYSTEM IH Pant is ordered with the Escape Belt, there shall be an additional carabiner hold down strap, added to the right front belt loop.

____Exception

Comply

INTERNAL SEAT HARNESS SERIES 2

The internal seat harness shall be independently certified to NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Services, as a Class II harness. The harness shall consist of a 1¾ inches Kevlar® waist belt with an external hardware loop made from 2-inch-wide black Kevlar® webbing. All ends of webbing shall be reinforced with a coated fabric to prevent raveling. The waist belt, graded to waist size, shall secure at the front with a hook and an adjustable D-ring closure. This closure system is also the positive front closure for the pants. Attached to the waist belt are a left and a right 2-inch Kevlar® webbing leg loop, constructed without hardware, and graded for the circumference of the pant legs. The external hardware loop connecting each individual leg loop is constructed from two combined layers of webbing which form an A-frame and a connection point for the hardware. The leg loops shall be secured to the waist belt by means of a slot formed by an opening in the stitching combining the layers. This construction allows the leg loops to rest lower on the legs for less restriction when the harness is not loaded, but with the ability to snug up higher against the body when the harness is loaded. The slot openings also allow the waist belt to be adjusted in size with the leg loops properly positioned between the front belt loops and the front harness closure. The right and left leg loops shall be installed between the outer shell fabric of the pants and the pants liner, and the strap from each leg loop shall exit the outer shell under the front belt loops on each side of the pants front closure. The center of the hardware loop shall be sewn to narrow the width at its center and reinforced on the outside with a layer of Ara-Shield® material. Sewn to the inside of the center of the hardware loop shall be a 1-inch webbing, which forms a ring to secure the pin of the specified ladder hook. The A-frame hardware loop shall be sized to permit the ladder hook to be secured to the keeper strap located on the front left side of the pants. This hardware loop must be positioned to allow the use of the ladder hook without deploying the escape system, and to accommodate donning and doffing of the pants with all hardware installed. A D-ring with a sliding bar shall be attached to the hardware loop to connect to the escape system in the right pocket. Comply Exception

CMC CARABINEER

The ladder hook shall be a CMC ProSeries XL Aluminum Manual-Lock D ANSI Ladder Carabineer (red in color) and shall be third party certified to NFPA 1983 and ANSI Z359.12-11 (Fed OSHA requires compliance with ANSI Z359.12-11 for "Positioning Lanyards"). The gate shall open by pulling the gate towards self and twisting the gate 45 degrees. The escape system (locking carabineer, rope, descender, and hook) is not supplied with the pants.

Comply	Exception	

ARTICULATED KNEE

The outer shell of the pant legs shall be constructed with horizontal pleats in the knee area with corresponding darts in the liner. In order to provide increased freedom of movement and maximum flexibility, extra material is built into the knee area and this additional fullness is contained by stitching down the pleats on the inside of the shell. The knee reinforcement shall be installed proportionate to the pant inseam, in such a manner that it falls in an anatomically correct knee location.

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

Comply	Exception
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LINER KNEE THERMAL ENHANCEMENT

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

Comply	Exception
Compry	LACCPHON

CATHEDRAL KNEE REINFORCEMENTS

The knee area shall be reinforced with a layer of black Dragonhide[®] material.

The cathedral shaped knee reinforcement shall be centered on the leg to ensure proper coverage when bending, kneeling and crawling. The knee reinforcements shall measure a minimum of approximately 7 inches wide by 12 inches high at the highest point and shall be double stitched to the outside of the outer shell in the knee area for greater strength and abrasion resistance. The articulated cathedral knee reinforcement shall be cut and stitched to the shell in such a way that there shall be an arch at the top of the reinforcement, tapering down the sides of the reinforcement with a squared off bottom. Knee reinforcements of a smaller size do not provide the same protective coverage and shall be considered unacceptable.

	Comply	Exception	
17 Page			

PADDING UNDER KNEE REINFORCEMENTS

Padding for the knees shall be accomplished with one layer of **Silizone**[®] foam, sandwiched between the thermal liner and moisture barrier. The placement of Silizone[®] padding on the thermal versus the shell reduces bulk in the shell also serves to protect the padding from abrasion and other wear issues that the outer shell is subject to. Pants with Silizone[®] knee padding on the shell as opposed to on the liner, do not provide the same level of bulk reduction and abrasion resistance and are not recommended.

ComplyException

EXPANSION BELLOW POCKET (LEFT)

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

ESCAPE SYSTEM POCKET (CROSBY) (Right Pocket)

One 2-inch-deep by 7 inches wide by 9 inches high expansion pocket shall be placed over the outer leg seam at thigh level to accommodate storage and deployment of a **Crosby descender system**. The pocket shall be sewn to the pant with two rows of lock stitching and shall provide two drain eyelets, installed at the bottom of each pocket, for water drainage. The pocket shall be reinforced with a layer of Dragonhide® material sewn to the outside. The Dragonhide® shall form an angled pocket on the front of the pocket with stitching down the middle of the reinforcement to fit a **Crosby style hook** with a smaller approximate 2½ by 2½ inch pocket to the side of the center stitching. There shall be a layer of 2-inch black webbing at the bottom of the angled Dragonhide® pocket for additional reinforcement. The pocket flap shall be rectangular in shape and measure approximately 8½ inches by a minimum of 10½ inches, constructed of two layers of Dragonhide material and double stitched to the outer shell. The lower edge of the flap shall have **Silizone**® foam padding stitched between the two layers to allow a better grip on the flap. Two pieces of 1½ inches by 9-inch FR hook fastener tape shall be installed on the inside of the pocket flap (one on each side). Two

pieces of 1 inch by 5 inches FR loop fastener tape shall be installed on the front of the pocket (one on each side). The upper left side of the pocket shall angle downward to allow a loop constructed of a double layer of outer shell material to be installed above the side angled edge of the pocket. This loop will hold a smaller carabiner inside the pocket. A self-material cradle flap measuring approximately 5 inches will be installed 1 inch down inside the pocket. The cradle flap will attach to the front of the pocket with FR hook and loop fastener tape measuring 1 inch by a minimum of 5 inches. This cradle flap shall support the hardware above the rope in the lower portion of the pocket.

Comply	Exception
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SPANNER WRENCH POCKET

Each pant shall have a pocket double stitched to it designed for the storage of a spanner wrench and shall measure approximately 3.5 inches wide by 9 inches high with a 1-inch expansion at the top. A rust resistant metal drain eyelet shall be installed at the bottom of the pocket to facilitate drainage of water. The front of the pocket shall be reinforced with Dragonhide. The pocket flap shall be constructed of two layers of outer shell material measuring approximately 5 inches deep and 1/4 inch wider than the pocket. The pocket flap shall be closed by means of flame-resistant hook and pile fastener tape. A 1 1/2 inch by 3-inch piece of FR hook fastener tape shall be installed vertically on the inside of the pocket flap beginning at the center of the bottom of the flap. A 1 1/2 inch by 3-inch piece of FR pile fastener tape shall be installed horizontally on the outside of the pocket near the top center and positioned to engage the hook fastener tape. The spanner wrench pocket shall be located on the lower right leg.

Comply	Exception

PANT CUFF REINFORCEMENTS

The cuff area of the pants shall be reinforced with a layer of black Dragonhide® material

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

Comply	Exception
	Enception

PADDED RIP-CORD SUSPENDERS & ATTACHMENT

On the inside waistband shall be attachments for the standard "H" style "Padded Rip-Cord" suspenders. There will be four attachments total -2 fronts, 2 back. The suspender attachments shall be constructed of black Ara-Shield® material measuring approximately $\frac{1}{2}$ inch wide by 3-inches long. They shall be sewn in a horizontal position on the ends only to form a loop. The

appearance will be much like a horizontal belt loop to capture the suspender ends.

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

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

Threaded through and attached to the thermoplastic loops on the forward and rear ends of the suspenders will be black aramid suspender attachments incorporating two snap fasteners. The aramid suspender attachments are to be threaded through the suspender attachment loops on the inside waistband of the pants. The aramid suspender attachments will then fold over and attach to themselves securing the suspender to the pants.

Comply	Exception
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REVERSE BOOT CUT

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

Comply	Exception
Compry	Exception

THIRD PARTY TESTING AND LISTING PROGRAM

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

Comply	Exception	

LABELS

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

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

	~ .
•	Size
•	DIZU

Comply	Exception

ISO CERTIFICATION / REGISTRATION

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

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WARRANTY:

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

Comply	Exception
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HOOK AND LOOP SUPPORT PROGRAM

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

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

Comply	Exception
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SIZING BY VENDOR:

Sizing samples shall be on hand for use when sizing. The vendor shall be available to perform all sizing requirements within 96 hours of written notice. Measuring with a tape measure is not acceptable.

Comply	Exception
Compry	LACCPUOL

GARMENT TRAINING AND SUPPORT

OSHA requires employees be trained on the capabilities and limitations of their Personal Protective Equipment. The selected vendor shall provide the following:

On-site care and maintenance training shall be provided by the manufacturer. Training shall be in compliance with NFPA 1851, current edition, at the conclusion of which each participant shall receive a certificate of completion.

An on-site OSHA mandated training class on the Knowing the Limits of Your PPE shall be provided at no charge. The training shall include structural firefighting coat, pant and boots.

Exception

BAR-CODE/RECORD KEEPING INTERFACE

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

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

- Brand
- Order Number
- Serial Number
- Style Number
- Color
- Description
- Chest/Waist Size
- Jacket/pant Length
- Sleeve Length
- Date of Manufacture
- Mark-For Data

This information shall be able to be imported into the manufacturers web-based system designed to facilitate the organization and tracking of assets in accordance with the cleaning and inspection requirements of OSHA and NFPA 1851.
ComplyException
PPE RECORD KEEPING
The manufacturer shall make available and no-charge, a password protected data based backed website that does not care whose brand of PPE assets are being recorded. The website shall have the functionality to allow the manufacturer to import all the pertinent data into the department's account so that the initial data entry by fire department personnel is eliminated.
The website shall allow for the department to use a barcode scanner, if desired, to scan the Interleaved 2 of 5 barcode found in the gear by going to the Search the Serial Number page in PPE record keeping program, and scanning the asset's barcoded serial number.
ComplyException
EXCEPTIONS TO SPECIFICATIONS
All exceptions to the above specifications must be clearly stated for each heading. Use additional pages for exceptions, if necessary.
COUNTRY OF ORIGIN
Jackets and Pants shall be manufactured in the United States.

Specifications for Structural Fire Fighting 14" Pull-On Boots Globe FootGear Structural SupremeTM

NFPA 1971 AND NFPA 1992 CERTIFIED

Certified to NFPA 1971, Standard on Protective Ensembles for Structural Firefighting and Proximity Firefighting, Current Edition for Structural Fire Fighting and NFPA 1992, Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies, Current Edition.

Exception

GENERAL DESIGN

14 inch Pull-On athletic footwear (cement construction) boot, black flame-resistant and water-resistant leather, double-stitched leather joining seams, hi-vis yellow and silver reflective trim, leather-trimmed webbing pull straps, padded leather collar, padded leather flex joints in the shaft above vamp and heel, liquid and chemical resistant breathable bootie liner, cut-resistant and thermal protective bootie-shield liner, composite safety toe cap, composite shank, composite penetration-resistant insole barrier, molded shin guard, flame-resistant synthetic rubber molded cup outsole and toe bumper, 3D lasting board, molded composite heel counter, internal heel fit system, and a removable molded footbed as well as an additional insert for use in conjunction with the footbed.

Comply	Exception
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SLIP RESISTANCE

Boots must exceed the minimum test values for slip resistance (average of left and right foot) as detailed below to provide superior performance in dry, wet, and frosted ice conditions. Boots that do not exceed these minimums in all conditions shall not be acceptable. Bidders must promptly supply a Technical Services Report from a recognized independent testing laboratory upon request showing the boots bid exceed this requirement.

Test Method: VUSA TT S&C 1-18 Ed.1 Rev. 0

Slip Resistance of Footwear and Floorings

Load = 500 N

Dry Clay Quarry Tile: Forepart > 1.00 Heel > 1.00

Wet Clay Quarry Tile: Forepart > 0.60 Heel > 0.60

Frosted Ice -7° C Run 1: Forepart = 0.28 Heel = 0.28

Frosted Ice -7°C Run 4: Forepart > 0.12 Heel > 0.12

For maximum slip resistance each outsole shall have Siping lines. Siping lines cut into flat areas open when flexed to provide additional traction on water and ice. The boot shall also include self-cleaning lugs and an omni-direction tread pattern designed for superior performance in all terrains and when working on ladders.

Comply	Exception

FLEXIBILITY

Boots must reach the Maximum Flex Angle of 48 degrees without exceeding the critical bending moment with a resulting stiffness index less than 10.0 as detailed below to provide maximum flexibility. Boots that do not meet this requirement shall not be acceptable. Bidders must promptly supply a Technical Services Report from a recognized independent testing laboratory upon request showing the boots bid meet this requirement.

Test Method: SATRA TM194:2004

Longitudinal stiffness of footwear

____Comply ____Exception

FIRESTORM LEATHER

Boots shall be made from heavy-duty, flame-resistant and water-resistant full-grain cattle hide leather measuring 2.0 - 2.2 mm of thickness for durable tear and puncture resistance. Tumbled full-grain cattle hide leather shall be utilized in collar and flex areas for mobility. The leather shall be chrome tanned to withstand high temperature with minimal shrinkage, re-tanned to impart water resistance and low water absorption and finished to retain maximum breathability. Leather shall meet or exceed the following physical tests:

•	Water Penetration	ASTM D2099	15,000 flex minimum
•	Dynamic Water Absorption	ASTM D2099	15% maximum
•	Static Water Absorption	ASTM D6015	30% maximum
•	Slit Tearing Strength	ASTM D2212	30 pound minimum
•	Moisture Vapor Transmission	n ASTM D5052350 g/	meter2/24 hours minimum
•	Flame Resistance	NFPA 1971	afterflame no more than 2.0 sec, not
melt or drip, no burn through.			
ComplyException			

CROSSTECH® FOOTWEAR FABRIC

A full-height, full sock, bootie liner made from a package of Omaha lining fabric, 300g felt insulation, and CROSSTECH® moisture barrier shall be provided for a liquid resistant and breathable moisture barrier as well as thermal protection as defined by the specified NFPA standards.		
	Comply	Exception
Synthetic Rubber Sculpted, Contusing a 2-part cross-linking adheroutsole must be made from a flan	ort, and weight retoured Cup Outsolesive that forms a lame, abrasion, oil, attance, and durabil	TRUCTION OUTSOLE eduction, the boot shall include a VIBRAM® ele cemented to the bottom and sides of the upper bond stronger than the materials it attaches. The acid, and slip resistant compound engineered for lity. Goodyear welt or direct attach construction
	Comply	Exception
BOOTIE-SHIELD LINER		
4.0 oz/yd ² shall be positioned be bootie to provide abrasion and c	etween the leather ut resistance and a ant (FR) protective	lend stitchbonded non-woven batting weighing or shell and the CROSSTECH® moisture barrier additional thermal protection. Boots that do not be bootie-shield between the leather shell and the be acceptable.
	Comply	Exception
COMPOSITE SAFETY TOE	CAP	
•	hape after impact.	al that is lighter than steel, does not transmit heat. Must exceed NFPA standards for safety. Metal
_	Comply	Exception

PADDED LEATHER COLLAR

The padded collar shall have a rolled top edge formed by folding over the leather to help the boots slide against the pants liner and reduce the potential for the pants liner to hang up on the top of the boots as well as to reduce abrasion against the wearer's calf.		
ComplyException		
COMPOSITE PENETRATION RESISTANT INSOLE BARRIER		
Penetration resistance shall be provided by a composite insole to maximize flexibility and insulate from heat or cold transmission. Must exceed NFPA standards for safety. Metal plates shall not be acceptable.		
ComplyException		
3D COMPOSITE LASTING BOARD		
Boot uppers shall be lasted to a molded and contoured dual-density lasting board with a built-in flex zone in the forefoot and a torsionally stable heel. Flat fiber board lasting boards shall not be acceptable.		
ComplyException		
COMPOSITE SHANK		
The shank shall consist of a composite material that is lighter than steel, does not transmit heat or cold, and springs back to shape better. Metal shank shall not be acceptable.		
ComplyException		
MOLDED HEEL COUNTER		
Boots shall have a molded heel counter of water-resistant composite material individually molded to fit each size perfectly. Leather or fiber board heel counters shall not be acceptable.		
ComplyException		
PADDED SHIN GUARD		
Boots shall include a padded composite shin guard to provide extra protection when working on a ladder. Moisture absorbing natural fiber padding shall not be acceptable.		
ComplyException		

SYNTHETIC RUBBER TOE BUMPER

Boots shall have a molded Flame Resistant (FR) synthetic rubber toe bumper to provide abrasion resistance when crawling. The toe bumper shall be cemented, and 2-needle stitched to the vamp.			
ComplyException			
3M SCOTCHLITE™ Reflective Material			
Boots shall have flame-resistant fluorescent yellow and silver 3M SCOTCHLITE TM reflective material sewn to both sides of the shaft for added visibility.			
ComplyException			
WEBBING PULL-STRAPS			
Boots shall have NOMEX® webbing pull-straps with leather trim securely attached to the leather uppers by inserting into to collar seam to minimize stitching through the leather.			
ComplyException			
INTERNAL FIT SYSTEM			
Boots shall have an anatomical foam insert that wraps around the top and sides of the heel with an opening to fit and hold the back of the heel securely while cushioning the ankle.			
ComplyException			
3D MOLDED FOOTBEDS SYSTEM			
Boots shall have a removable urethane foam footbed. The footbeds are contoured to cradle and cushion the bottom of the foot and to provide arch support. The footbeds shall have a moisture-wicking and anti-microbial fabric top layer. A second pair of 3D molded footbeds that are thicker in the forefoot is provided with every pair for a custom fit. This thicker footbed provides a snugger fit.			
ComplyException			

SIZES

Wide, and X-Wide widths. Boots must range that will provide an additional 3 in calves. Boots must be available in Wom Medium, Wide, and X-Wide widths.	also be available	le in a Wide Calf model in the same size ference at the calf to fit those with larger
Com	ply	_Exception
RESOLING SERVICE		
The winning vendor shall have resoling s	services availabl	le at their factory as needed.
Com	ply	_Exception
COUNTRY OF ORIGIN		
Boots shall be manufactured in the Unite	d States.	
Com	ply	_Exception
THIRD PARTY TESTING AND LIST	TING PROGRA	AM
The footwear shall be tested for complication independent testing lab which shall certificate shall be denoted by the independent testing	y and list compl	liance to that standard. Such certification
Com	ply	_Exception
LABELS		
Appropriate warning label(s) shall be per shall include the following information.	manently affixe	ed to each boot. Additionally, the label(s)
 Compliance to applicable NFPA Independent Testing Lab mark Manufacturer's name Manufacturer's address Manufacturer's boot identification Date of manufacture Size 		rent edition(s).
Com	plv	Exception

ISO CERTIFICATION/REGISTRATION

The manufacturer shall be certified and registered to ISO Standard 9001 to assure a satisfactory level of quality.
ComplyException
WARRANTY
The manufacturer shall warrant these boots to be free from defects in materials and workmanship for one year when properly used and cared for.
ComplyException
SIZING BY VENDOR
The vendor shall be available to perform all sizing requirements.
ComplyException
PPE RECORD KEEPING
The manufacturer shall make available at no-charge, a password protected data based backed website that allows all brands of PPE assets are being recorded. The website shall have the functionality to allow the manufacturer to import all the pertinent data into the department's account so that the initial data entry by fire department personnel is eliminated.
The website shall allow for the department to use a barcode scanner, if desired, to scan the Interleaved 2 of 5 barcode found in the gear by going to the Search the Serial Number page in PPE record keeping program, and scanning the asset's barcoded serial number.
ComplyException
EXCEPTIONS TO SPECIFICATIONS
All exceptions to the above specifications must be clearly stated for each heading. Use additional pages for exceptions, if necessary.

GLOVES

DESCRIPTION

Glove will be specifically designed and constructed for hand protection during structural

firefighting activities. The component materials are designed to withstand the effects of flame, heat, vapor, hazardous liquids, sharp objects and other hazards that are encountered during

structural firefighting.

The glove shall meet or exceed the requirements of the NFPA 1971 – 2018 Edition Standard on

Protective Ensemble for Structural Firefighting.

DESIGN AND FEATURES

The glove will have a varied layer construction with reinforcement added specifically where

needed according to the risk levels at different areas of the hand.

Five-fingered keystone thumb construction. The back side of the glove will feature a flexible multi-

layer knuckle guard across the entire width at the main knuckle. Seamless roll-over finger-tip

construction for enhanced tactility.

Gathered stitching around the entire wrist for a secure fit and to prevent debris from entering.

Will have a Long Cuff "wristlet" style with a Kevlar wrapped elastic band around the inside cuff

edge to secure the fit and prevent fire ground debris from entering; specifically, for use with turnout

jackets that do not have thumb wristlets.

Cuff edge trimmed with Kevlar piping and inside cuff to be reinforced with two layers of a 1 ½"

wide leather welt.

The glove inner liners will be sewn in and bonded with heat seal seam tape at each fingertip.

A leather Pull Tab at cuff end for easy donning.

A leather hang-up loop provided on the glove inside.

Labels to be made of 100% Nomex.

MATERIALS AND LAYERING

Outer Shell: 100% Water Resistant, Fire Resistant treated Goat skin.

Must have suede at the ring finger, middle finger and thumb are cut and sewn separately.

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The second palm side layer will be cut and puncture resistant 60% Kevlar/40% Nomex knit which to the full length from the fingertips to the cuff edge. The ring and middle fingers will have an additional layer of 100% Nomex knit.

There will be an additional two partial layers of 100% Nomex knit from the cuff edge to the palm.

The **back side** outer layer will be mainly water repellant goat skin which covers the fingertip area, a 1" wide welt across the entire finger crotch area and the cuff area from cuff edge to the knuckle guard edge.

The second and third layers are to be knitted 100% Kevlar and knitted 100% Nomex that both extend from the fingertips to the cuff edge and represent the back of thumb layers as well.

The flexible knuckle guard section is to be constructed additionally with two layers of wafers to be made of the industrial abrasive silicon carbide - each laminated to two layers of 100% Kevlar knit and backed entirely with an additional layer of 100% Kevlar knit.

The finger side walls are to be comprised of a 60% Kevlar/40% Nomex knit reinforced with a layer of 100% Nomex knit.

The glove will be lined with breathable Porelle PTFE fire retardant moisture barrier that is itself certified compliant to NFPA 1971-2018. The barrier is to be sealed around the perimeter to prevent liquid penetration from the NFPA test chemicals, blood borne pathogens and water. No stitching shall penetrate this barrier membrane and it shall remain flexible in sub-zero temperatures.

BARRIER SPECS

Highest Water Vapor Transmission of any Glove Barrier ASTM E96:B Test: 825 g/m2/24hr / ASTM E96:BW Test: 12,678 g/m2/24 hr. Waterproof: remains waterproof after repeated laundering cycles > 10,000 mm pressure without failure Durability: Withstands 40,000 Martindale abrasion cycles – aids in glove decontamination.

Certified: Triple certified NFPA 1971-2018 both inside and outside the glove and EN659. Chemical and Viral Protection tested beyond NFPA 1971-2018 requirements protecting against: Ethyl Benzene, Xylene, Phenol, Acetone, Benzene, Crude Oil, Diesel Fuel, 96% w/w Sulphuric acid and Toluene

The glove innermost liner is to be laminated 100% Nomex knit.

100% Kevlar high burst thread is to be used throughout the gloves.

SIZING

Shall be available in 64N (XS), 70N (S), 70W (M), 76N (M/L), 76W (L/XL), 82N (XL), 82W (2XL), 82XW (3XL). Cadet sizing with ½" shorter finger lengths and custom sizes are available by request.

[NEXT PAGE]

HELMETS

PRODUCT TYPE

Structural Firefighting Helmet(s) with Proximity Firefighting Option

GENERAL

Helmets manufactured in accordance with this specification are designed to mitigate adverse environmental effects to the firefighter's head while providing the specifying authority with what are, in their opinion, essential requirements.

PERFORMANCE CRITERIA/STANDARDS

Fire Helmets shall meet the requirements of NFPA 1971:2018 (or the current edition) for structural firefighting and proximity firefighting when that option is selected.

US-OSHA 1910.156, and CAL-OSHA.

All eye/face protection sold as part of the original helmet assembly shall be compliant with the impact requirements of the current editions of ANSI/ISEA Z87.1 and NFPA 1971.

PERFORMANCE VERIFICATION DATA REQUIREMENT

Response to this specification shall include a complete and current NFPA 1971 test report from a recognized, accredited test facility detailing all performance data for the helmet(s) and compliant helmet components included in the original assembly. Certificates of conformance and/or letters of certification alone shall not be acceptable. Component testing is not acceptable. Certification testing is conducted every year to a random lot size, as per NFPA requirements.

MANUFACTURER'S WARRANTY

Fire Helmets manufactured are to be free from defects in materials and/or faulty workmanship for a period of ten (10) years from the date of manufacture.

NOMEX HOODS

Particulate coverage throughout entire head including Sure-FitTM panel at crown. Front and back bib extends particulate barrier coverage beyond critical areas as identified by NFPA – Maximum Protection. UL Classified to NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting – Current Edition. Certification to the NFPA 1971, 2018 Edition Option for Particulate Protection – Current Edition.

FABRIC DESCRIPTION

Quilted composite durable water-resistant finish on exterior layer of jersey knit with Nomex® Nano Flex particulate barrier between the inside layer of jersey knit. Averages 95%-98% particulate filtration efficiency that improves with repeated launderings.

FABRIC PERFORMANCE VALUES	REQUIREMENTS FOR NFPA 1971 - 2018 EDITION	PGI TEST RESULTS
Particulate Efficiency	≥90%	96%
Thermal Protective Performance (TPP)		
Rib Knit		
As ReceivedAfter 5 Washings	20.0 (min) 20.0 (min)	30.2 33.1
Quilted Composite		
As ReceivedAfter 5 Washings	20.0 (min) 20.0 (min)	29.3 30.8
Total Heal Loss (THL)	≥ 325 W/m2	401.3 W/m2
Hood Material Burst Strength	> 225 N	614 N
Flame Resistance Test Quilted Composite		
After Flame (Wales x Courses)		
As ReceivedAfter 5 Washings	≤ 2.0 sec ≤ 2.0 sec	0.0 sec x 1.0 sec 1.0 sec x 1.0 sec
Char Length (Wales x Courses)		
As ReceivedAfter 5 Washings	≤ 100 mm ≤ 100 mm	18 mm x 17 mm 3 mm x 2 mm
Cleaning Shrinkage Resistance Test		

FABRIC PERFORMANCE VALUES	REQUIREMENTS FOR NFPA 1971 - 2018 EDITION	PGI TEST RESULTS
Hood Measurement		
After 5 Washings	≥ -5%	-0.3%
Face Opening Measurement		
After 5 Washings	Meets Requirement	YES
Heat & Thermal Shrinkage Resistance Test		
Hood Measurement		
As ReceivedAfter 5 Washings	≥ -10% ≥ -10%	0% 0%
Face Opening Measurement		
As ReceivedAfter 5 Washings	Meets Requirement Meets Requirement	YES YES
Seam Breaking Strength Test		
Quilted to Quilted	> 181 N	1064 N
Melt or Drop When Exposed to Flame	No Melting or Dripping	NONE