

# Fire Fighting Helmet

1/16/2013

City of Gallatin

## 1.0 Introduction

The City of Gallatin is seeking bids for Fire Fighting Helmets for the Fire Department. Bids will be due on January 24<sup>th</sup> 2013 at 2:00 pm in a sealed envelope clearly marked: **Fire Fighting Helmet**

## 2.0 Scope of Work

The City of Gallatin seeks to purchase at a not to exceed amount of 73 Fire Fighting Helmets for the Gallatin Fire Department. The scope of this purchasing specification encompasses design, construction, materials and performance criteria deemed necessary for helmets utilized for structural firefighting. 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 is in their opinion, essential requirements.

## 3.0 Technical Requirements

### **HELMET SHELL:**

The Fire Fighting Helmet shall be of a Traditional American Fire Service style. The shell shall be made of a four piece crown section with rib-type reinforcement and a brim section with a short visor in front continuing around the sides with a large rear area. The crown section shall be comprised of eight combs, or ribs. There shall be one folded comb (rib) in each of the four crown sections and four joint combs between these sections to form four major reinforcing ribs. Stitching to be 4 cord mercerized cotton thread in #8-10 gauge, to have not more than 10 nor less than 8 stitches per inch.

The brim section shall be a one piece leather section, stitched to the crown section with two rows of stitching. The outside edge of the brim shall be folded over and stitched around a 11 gauge, rust resistant, endless steel wire. The brim shall be embossed with the traditional vine scroll work and subjected to 10 tons of pressure to get its shape and make it rigid. The leather helmet shall be 11-13 oz., vegetable tanned, top grain domestic steer hide, treated with strengthening hardeners. The shell is made in two sizes, medium and large.

The exterior of the shell shall be completely coated with a high gloss, high heat, chemical and abrasion resistant, flame-retardant finish coat, by using either a color-pigmented paint coat or a clear lacquer. The

FIRE FIGHTING HELMET shall be supplied in the following color; NATURAL.

The FIRE FIGHTING HELMET shall be furnished with a carved brass eagle front-piece holder which shall be attached to the shells front main rib, and positioned to support the top of a standard 6" fire department identification shield.

The shell shall have two threaded studs mounted to the center of the front visor of the brim. These shall provide for positioning and retention of a standard 6" fire department identification shield once placed and attached by two acorn nuts.

The shell shall have a helmet hanger comprised of a 3/4", nickel plated "D" ring which will be riveted to the center rear edge of the brim.

**IMPACT LINER:**

The impact liner shall be a combination of a rigid cell, high temperature urethane foam attached to a flame-resistant thermoplastic inner liner. The impact liner shall include a brass retaining ring fastened to the base of the inner liner. The impact liner shall be fastened to the leather shell by mean of four brass rivets located at the base of the crown of the helmet shell.

**HEAD SUSPENSION:**

The FIRE FIGHTING HELMET suspension shall be made of three fixed, 3/4" wide nylon web straps mounted at 6 points on the impact liner to form a six-way overhead strap assembly. Each of the straps shall be fastened to the brass retaining ring, located at the base of the impact liner, by means of a brass rivet.

**SIZING ADJUSTMENT:**

The FIRE FIGHTING HELMET is made in 2 adjustable size ranges; medium and large. The size of the headband may be adjusted to fit the wearer's head by means of a ratchet adjustment system. The headband shall have a head size range of 6-3/8 to 8, adjustable in 1/8 increments. The head band is attached to the sides of the impact cap liner extension tabs by thermoplastic split-buttons. The sizing adjustments range shall be as follows:  
MEDIUM: 6 1/2 - 7 1/2 & LARGE 7 5/8 - 8.

**COMFORT LINER:**

The lining shall be of one piece construction, comprised of cotton sateen sewn to a foam neoprene ring. A piece of chrome-tanned goat leather shall be sewn to the area of the sateen liner that rests against the forehead. There will also be leather foam cored ratchet pad which is removable.

**CHINSTRAP:**

The chinstrap shall be equipped with a three piece chinstrap, made from ¾" Nomex webbing which are attached by a quick-release buckle system constructed of high-temperature, super-tough nylon on the left side of the helmet and by a die cast zinc postman's slide buckle on the right hand side. The two (short) chinstrap sections, located on the left and the right hand sides of the helmet, shall be fastened to the impact liner. The middle (long) section shall bayonet into the quick release buckle on the left-hand side and feed through the postman's slide buckle on the right. The middle section shall be a minimum of 23" in length and the total length of the chinstrap shall be 35" at full extension, end to end.

**EAR/NECK PROTECTION:**

Ear and neck protection shall be provided by a full-cut, 19.0" long, 6.5" wide earlap. The earflap shall consist of a 4.5oz.Nomex outer-shell sewn to a flame-resistance black flannel inner liner. The earflap shall be secured to the brass retaining band inside the impact liner.

**EYE PROTECTION;****BOURKE EYE SHIELDS:**

The Bourke Eye Shield is comprised of dual (2), 2.85 wide x 5.15" long x 0.115" thick, transparent polycarbonate lenses that pivot up and down at 90° simultaneously to provide eye protection when the shield is down, and are low-profile against the underside of the front brim when the lenses are flipped up. The inner edges of both lenses are designed to connect when the lenses are flipped down. The lenses are fastened to a single key and cable (spring) system that allows the two (2) lenses to move simultaneously. The entire assembly is mounted to a brass plate, which is fastened to the center of the front brim of the helmet shell.

**RETRO-REFLECTIVE TRIM:**

The helmet shall have eight tetrahedron shaped pieces of Lime-Yellow, retro-reflective, fluorescent Reflexite® trim around the exterior of the crown of the helmet shell for maximum daytime and nighttime visibility.

**PERFORMANCE CRITERIA:**

The FIRE FIGHTING HELMET shall meet the requirements of US-OSHA (CFR 1920) NBSIR 1977, and CAL-OSHA

**PERFORMANCE VERIFICATION DATA REQUIREMENT:**

Response to this specification shall include a complete, and current, US-OSHA test report from a recognized, accredited test facility detailing all performance data for the helmet being offered and all compliant helmet components. 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 US-OSHA requirements.

#### **4.0 Vendor Requirement**

##### **MANUFACTURER'S WARRANTY:**

Helmets shall be warranted, for the lifetime of the helmet, to be free of defects in material and workmanship when sold. The manufacturers shall replace, free of charge, any such helmets determined to be defective by the manufacturer provided the factory is notified in writing within 30 days of the date of detection of the defect.

**Delivery:** Vendor shall deliver f.o.b. to Gallatin, TN.

**Price: Unit Price will be good for 60 days from due date.**

##### **MAINTENANCE, REPAIR and RETIREMENT:**

Upon the customer's request, a manufacturer's representative will conduct a training class explaining the proper maintenance, repair and retirement of this helmet for the dealer.

#### **5.0 Evaluation of Proposals**

The City of Gallatin will award the contract to lowest responsible and responsive bidder meeting specifications, quality, and performance standards pursuant to the Municipal Purchasing Act of 1983. Response will be based on the following factors;

- Completeness of response
- Cost
- Vendor track record, including references
- Quality of service
- Quality of product

#### **6.0 Contract Award**

The City of Gallatin reserves the right to reject any or all proposals and to waive any informality found therein. The City of Gallatin will award a contract based on evaluations described above.

**7.0 Question Submissions**

Gallatin Fire Department

Attn: Walter Dale

119 GFD Memorial Blvd, Gallatin TN 37066

Telephone: 615-452-2771

**8.0 Proposal Submission**

**ALL SUBMISSIONS MUST BE SEALED AND CLEARLY MARKED**

**“Fire Fighters Helmet”**

**BID DUE DATE: January 24<sup>th</sup> 2013 at 2:00 pm**

Proposals shall be directed to the attention of:

Finance Department

Attn: J.R.Smith, Jr

132 West Main Street, Gallatin, TN 37066

Telephone: 615-451-5963

**Helmet: \$ \_\_\_\_\_ EACH**

Name of Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_