**Notice to Bidders**
**Ithaca Tompkins Regional Airport**
**Aircraft Rescue and Fire Fighting (ARFF) Vehicle**

**SEALED BIDS** for an Aircraft Rescue and Fire Fighting (ARFF) Vehicle will be accepted at the Tompkins County Finance Department, Purchasing Division, 125 East Court Street, Old Jail Building, 2nd Floor, Ithaca, New York, 14850 up until 11:30 a.m. on July 2, 2014 at which time and place they will be opened and publicly read.

Specifications are available for download at: www.tompkinscountyny.gov/purchase/current-bids.

Questions regarding the procurement process may be directed to Lisa Hall, lhall@tompkins-co.org, or (607) 274-5500.

Tompkins County reserves the right to waive any informalities and to reject any or all bids.

Lisa M. Hall
Buyer

**Tompkins County**
**Request for Bid – Submission Instructions**

Respondents shall submit their bid response per the instructions below. Respondents who do not follow these guidelines may have their bids rejected as incomplete or non-responsive.

- Respondents shall read all documents contained in this specification package. Failure to do so does not excuse respondent from abiding by all instructions, terms or conditions.
- Responses shall be submitted to the location and in the format indicated in the specifications no later than the date and time indicated.
- The County reserves the right to amend the specifications prior to the due date by written "Addenda". It is the respondent's responsibility to ascertain whether any addenda have been issued prior to submitting their bid.
- Respondents shall submit their bid in a sealed package or envelope with the name of their company and the title of the Request for Bid.
- Respondents must provide one original printed copy, with original signatures, of their bid response. Electronic files may be requested as well.
- Respondents shall submit **all** forms that require signatures with their bid response.
- All responses submitted become the property of the County and are subject to Public Information Policy.
- This invitation for bid does not commit the County to award a contract, nor shall the County be responsible for any cost or expense that may be incurred by the respondent in preparing and submitting their response or any cost incurred prior to the execution of a contract.
- The County reserves the right to cancel the contract without cause with a minimum of thirty (30) days written notice. Termination or cancellation of the contract will not relieve the respondent of any obligations or liabilities resulting from any acts committed by the respondent prior to the termination of the contract. The respondent may cancel the contract with one hundred-twenty (120) days written notice.

**Tompkins County**
**Request for Bid – Terms & Conditions**

**Method of Award:**
The County reserves the right to award the contract to the respondent who submits the bid(s) that prove(s) to be in the best interest of the County. The County has the sole discretion and reserves the right to cancel this request, reject any/all responses, to waive any/all informalities and/or irregularities if it is deemed to be in the best interest of the County to do so.

**Contract Extension:**
The County agrees, under the General Municipal Laws of New York State to allow all authorized users who wish to utilize any contract awarded as a result of this solicitation to do so. However, it is understood that the extension of such contract is at the discretion of the respondent and the respondent is only bound to the contract between itself and the County.

**Term of Contract:**
Unless otherwise specified, any contract resulting from this solicitation shall be for one year with the option to renew for up to three (3) additional twelve (12) month periods by mutual agreement in accordance with the terms of the contract.

**Contract Award:**
The contract award, if any, will be made within forty-five (45) calendar days of due date. The contract shall be awarded to the respondent who submits the lowest responsible bid that proves to be in the best interest of the County.

**Non-Appropriation Clause:**
In accordance with New York State General Municipal Law, the County will not be liable for any purchases or contracts for goods or services for which funding is not available. As a result, the respondent agrees to hold the County harmless for any contracts let for which funding either does not currently exist, or for which funding has been removed prior to the authorization to proceed. Should it become necessary for the County to cancel a project after the order to proceed has been issued, the County will only be liable for, and the respondent agrees, to only assess those financial damages that it can prove to have incurred as a result of the contract cancellation.

**Guarantee:**
The respondent shall guarantee that the product(s) or equipment provided is standard new products or equipment (unless otherwise requested), latest model of regular stock product and in current production. Replacements parts shall be easily obtained and that no attachment or part (if applicable) has been substituted or applied contrary to the manufacturers' recommendations and standard practice. Every product delivered shall be guaranteed against faulty material and workmanship for the term(s) of the contract(s). If during this period such faults develop, the product(s) shall be replaced at no cost to the County.

**Late Delivery Penalties:**
Delivery terms shall be stated in the detailed specifications, or may be requested from the respondent to be specified on the bid form. By signing the bid forms the respondent agrees that they are able to meet the specified requirements. A penalty fee of $10.00 per calendar day, for each day the item(s) ordered are not delivered to the proper County location may be assessed. In the event that the item is on backorder through no fault of the respondent, the respondent is required to inform the County immediately. Late penalty fees shall be deducted from the invoice once the item is received by the County.

**Invoices:**
Invoices shall be mailed directly to the ordering department. Invoices mailed to the incorrect location may not be forwarded thus causing delay in payment.

**Tax on Materials:**
In regard to any taxes applicable to this project respondents are to acquire a copy of form ST-120.1 from the New York State Department of Taxation and Finance and follow accordingly. Tompkins County is tax exempt. If required, a Tax Exemption Certificate will be forwarded upon request.

**Failure to Perform:**
In the event the equipment and/or products fail to perform to the County's expectations the vendor shall, at its own expense, repair or replace said item(s).

**Installation of Equipment:**
In the event that installation of equipment is needed, the respondent shall arrange with the County for the installation within forty-eight (48) hours after delivery of the product(s).

**Training:**
If required, training shall take place during regular business hours. Training shall be provided until all County personnel involved in the contract are adequately trained.

**Financing of Material or Equipment Purchases:**
When any bid includes the lease and/or purchase of material and/or equipment the respondent shall submit a price on the bid form provided by the County. The price offered shall include all delivery, installation (if applicable), finance, and any other charges that may be associated with said purchase or lease. The County shall only deal with the contractor/vendor actually submitting the bid AND arrangements made between the respondent and any other party as a part of this bid are strictly between those parties and the County shall not be included or required to participate in them in any way. Furthermore, the County shall only make payments directly to the vendor awarded a contract and issued a purchase order or authorization to proceed. The County shall not make partial or pre-payments of any kind unless stipulated in the specifications by the County.

**Pricing Adjustments:**
Pricing adjustments will only be considered at the time of bid renewal. If, in the opinion of the County, any price adjustment request is in excess of that acceptable to the County, the County reserves the right to reject the proposed increase and seek new bids.

**Workforce Diversity and Inclusion:**
Tompkins County government is committed to creating a diverse and fully inclusive workplace that strengthens our organization and enhances our ability to adapt to change by developing and maintaining:

A. An organization-wide understanding and acceptance of the purpose and reasons for diversity;
B. Recruitment and retention policies that assure a diverse workforce;
C. A workplace environment that is welcoming and supportive of all;
D. Awareness, understanding and education regarding diversity issues;
E. Zero tolerance for expressions of discrimination, bias, harassment, or negative stereotyping toward any person or group;
F. A workforce ethic that embraces diversity and makes in the norm for all interactions, including delivery of services to the public.

Respondents are encouraged to include an outline of their diversity policy in their proposal response.

**Contract Re-Assignment:**
The respondent shall not re-assign any portion of the any contract that results from this solicitation without the express written consent of the County.

**Deviations:**
Deviations to the specifications are to be so noted and fully explained. Tompkins County reserves the right to accept any or all deviations if it proves to be in the best interest of the County.

**Corporate Compliance:**
FEDERAL FUNDING COMPLIANCE: The Respondent agrees to comply with all Federal, State, and local laws and regulations governing the provision of goods and services under this Contract. To the extent that federal funds are provided to the Respondent under this contract, the Respondent agrees that it will comply with all applicable federal laws and regulations, including but not limited to those laws and regulations under which the Federal funds were authorized.

Further, Respondent agrees to comply with the County's Compliance Plan regarding Federal and State fraud and abuse laws; the Compliance Plan can be reviewed at www.tompkins-co.org or a copy can be obtained from Tompkins County Administration, 125 East Court Street, Ithaca, NY 14850.

Respondents that are providers of healthcare services certify that the Respondent, and all employees, directors, officers, and subcontractors of the Respondent, are not "excluded individuals or entities" under Federal and/or New York State statues, rules and regulations, to determine if any of them are on or have been added to the exclusion list.

The Respondent shall promptly notify the County if any employee, director, officer of subcontractor is on or has been added to the exclusion list. The County reserves the right to immediately cancel this contract, at no penalty to the County, if any employee, director, officer or subcontractor is on or has been added to the exclusion list.

By submitting a response to a Request for Proposals, you are attesting to the fact that you and/or the provider, which you represent, have not been sanctioned nor excluded by any of the aforementioned entities.

**Iranian Energy Sector Divestment:**
By submitting a response to this solicitation, the respondent hereby represents that said respondent is in compliance with New York State General Municipal Law Section 103-g entitled "Iranian Energy Sector Divestment", in that said respondent has not:

a. Provided goods or services of $20 Million or more in the energy sector of Iran including, but not limited to, the provision of oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran; or

b. Acted as a financial institution and extended $20 Million or more in credit to another person for forty-five days or more, if that person's intent was to use the credit to provide goods or services in the energy sector of Iran.

Any respondent who has undertaken any of the above and is identified on a list created pursuant to Section 165-a (3)(b) of the New York State Finance Law as a person engaging in investment activities in Iran, shall not be deemed a responsible bidder pursuant to Section 103 of the New York State General Municipal Law.

Except as otherwise specifically provided herein, every respondent submitting a response to this solicitation must certify and affirm the following under penalties of perjury:

(1) "By submission of this response to solicitation, each respondent and each person signing on behalf of any respondent certifies, and in the case of a joint response, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief, that each respondent is not on the list created pursuant to NYS Finance Law Section 165-a (3)(b)."

Except as otherwise specifically provided herein, any response to this solicitation that is submitted without having complied with subdivision (1) above, shall not be considered for award. In any case where the respondent cannot make the certifications as set forth in detail the reasons therefore. The County reserves the right, in accordance with General Municipal Law Section 103-g to award the contract to any respondent who cannot make the certification on a case-by-case basis under the following circumstances:

(1) The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012, and the respondent has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging any new investments in Iran; or

(2) The County of Tompkins has made a determination that the goods and services are necessary for the County to perform its functions and that, absent such an exemption, the County of Tompkins would be unable to obtain the goods or services for which the Bid is offered. Such determination shall be made by the County in writing and shall be a public document.

**Living Wage**

Tompkins County must consider the wage levels and benefits, particularly health care, provided by contractors when awarding bids or negotiating contracts, and to encourage the payment of livable wages whenever practical and reasonable.

If contractor certifies on Attachment A that its employees directly providing services outlined in this contract are NOT paid a living wage, the department contract representative may have a conversation with contractor to understand the cost implications of achieving the living wage threshold, whether there are structural barriers impacting the ability to pay the living wage, plans to improve wages over time, generous fringe benefits, or other considerations that should be applied when addressing the question of whether it is practical or reasonable to meet the living wage threshold including the cost required to bring the contract to the living wage threshold.

## 3.4. VEHICLE PROCUREMENT SPECIFICATION, CLASS 4

### PROCUREMENT SPECIFICATION
### Class 4
### AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) VEHICLE

1. SCOPE. This Procurement Specification (PS) covers a commercially produced diesel engine driven ARFF vehicle for an Index B airport. It includes a 1500 gallon water/Aqueous Film Forming Foam (AFFF) fire suppression system:
500 lb sodium-based dry chemical only complementary system.

The ARFF vehicle is intended to carry rescue and fire fighting equipment for the purpose of rescuing aircraft passengers, preventing aircraft fire loss, and combating fires in aircraft.

2. CLASSIFICATION. The ARFF vehicle(s) covered by this PS are classified in accordance with Part 139, Certification and Operations: Land Airports Serving Certain Air Carriers, Section 315, Aircraft Rescue and Firefighting: Index Determination; Section 317, Aircraft Rescue and Firefighting: Equipment and Agents; and Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles, as follows:

| Airport Index | Vehicle Class | Minimum Rated Capacities (gallons/liters) |
|---|---|---|
| Index B | 4 | 1500 gallon (5678 liter) water/AFFF solution |

3. VEHICLE CONFORMANCE/PERFORMANCE CHARACTERISTICS. The ARFF vehicle will be in accordance with the applicable requirements of National Fire Protection Association (NFPA) 414, Standard for Aircraft Rescue and Fire Fighting Vehicles (2007 Edition), and AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles.

3.1 General Administration Requirements.

3.1.1 Manuals: Technical manuals will consist of operator, service, and parts manuals. All manuals are required to be provided in hardcopy and in digital format on CDs when requested.

3.1.1.1 Technical manuals. The overall format for the manuals will be commercial. Each technical manual will have a title page. Line art will be used to the maximum extent possible for illustrations and parts lists. One complete set of engine and transmission parts, service and operator's manuals will be packed with each vehicle.

a. The contractor will provide digitized manuals in CD format when requested in addition to or in place of printed paper copies.

b. The contractor will provide two complete sets of hardcopy manuals and / or CDs when requested.

3.1.1.1.1 Operator's manual. The operator's manual will include all information required for the safe and efficient operation of the vehicle, including fire extinguishing systems, equipment, and any special attachments or auxiliary support equipment. As a minimum, the operator's manual will include the following:

a. The location and function of all controls and instruments will be illustrated and functionally described.

b. Safety information that is consistent with the safety standards established by the Occupational Safety and Health Administration (OSHA) and NFPA.

c. All operational and inspection checks and adjustments in preparation for placing the vehicle into service upon receipt from the manufacturer.

d. Tie down procedures for transport on a low-boy trailer.

e. Warranty information and the period of the warranty coverage for the complete vehicle and for any component warranty that exceeds the warranty of the complete vehicle. Addresses and telephone numbers will be provided for all warranty providers.

f. General description and necessary step-by-step instructions for the operation of the vehicle and its fire extinguishing system(s) and auxiliary equipment.

g. A description of the post-operational procedures (draining, flushing, re-servicing, et cetera).

h. Daily maintenance inspection checklists that the operator is expected to perform, including basic troubleshooting procedures.

i. Disabled vehicle towing procedures.

j. Procedures and equipment required for changing a tire.

k. Schedules (hours, miles, time periods) for required preventative maintenance and required periodic maintenance.

l. Line art drawing of the vehicle, including panoramic views (front, rear, left, and right sides) showing basic dimensions and weights (total vehicle and individual axle weight for the unloaded and fully loaded vehicle). For the purposes of this AC, "unloaded" is defined as a lack of agent, occupants and compartment load, and "loaded" is defined as including agent, occupants and compartment load.

3.1.1.1.2 Service manual. The service manual will identify all special tools and test equipment required to perform servicing, inspection, and testing. The manual will cover troubleshooting and maintenance as well as minor and major repair procedures. The text will contain performance specifications, tolerances, and fluid capacities; current, voltage, and resistance data; test procedures; and illustrations and exploded views as may be required to

permit proper maintenance by qualified vehicle mechanics. The manual will contain an alphabetical subject index as well as a table of contents. The service manual will contain at least the following, where applicable:

a. Fire fighting system schematic(s).

b. Hydraulic schematic.

c. Pneumatic schematic.

d. Electrical schematic.

e. Winterization schematic.

f. Fuel schematic.

g. Schedules for required preventative maintenance and required periodic maintenance.

h. Lubrication locations, procedures, and intervals for parts of the vehicle and equipment that require lubrication.

3.1.1.1.3 Parts identification manual. The parts manual will include illustrations or exploded views (as needed) to identify properly all parts, assemblies, subassemblies, and special equipment. All components of assemblies shown in illustrations or exploded views will be identified by reference numbers that correspond to the reference numbers in the parts lists. All purchased parts will be cross-referenced with the original equipment manufacturer's (OEM) name and part number. The parts identification manual will provide the description and quantity of each item used for each vehicle. The size, thread dimensions, torque specifications, and special characteristics will be provided for all nonstandard nuts, bolts, screws, washers, grease fittings, and similar items. The manual will contain a numerical index. The parts manual will contain a list of all of the component vendor names, addresses, and telephone numbers referenced in the parts list.

3.1.2 Painting, plating, and corrosion control.

3.1.2.1 Finish. Exterior surfaces will be prepared, primed, and painted in accordance with all of the paint manufacturer's instructions and recommendations. Vehicles will be painted and marked in accordance with AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport. The interior finish of all compartments will be based on the manufacturer's standard production practice. This may include painting, texturing, coating or machine swirling as determined by the manufacturer. All bright metal and anodized parts, such as mirrors, horns, light bezels, tread plates, and roll-up compartment doors, will not be painted. All other surfaces capable of being painted must be in the appropriate yellow-green color.

3.1.2.2 Dissimilar metals. Dissimilar metals, as defined in MIL-STD-889, Dissimilar Metals, will not be in contact with each other. Metal plating or metal spraying of dissimilar base metals to provide electromotively compatible abutting surfaces is acceptable. The use of

dissimilar metals separated by suitable insulating material is permitted, except in systems where bridging of insulation materials by an electrically conductive fluid can occur.

3.1.2.3 Protection against deterioration. Materials that deteriorate when exposed to sunlight, weather, or operational conditions normally encountered during service will not be used or will have a means of protection against such deterioration that does not prevent compliance with performance requirements. Protective coatings that chip, crack, or scale with age or extremes of climatic conditions or when exposed to heat will not be used.

3.1.2.4 Reflective stripes. A minimum eight (8) inch horizontal band of high gloss white paint or white reflective tape (Retroreflective, ASTM-D 4956-09, *Standard Specification for Retroreflective Sheeting for Traffic Control*, TYPE III & above) must be applied around the vehicle's surface.

3.1.2.5 Lettering. The manufacturer will apply the airport's 'Name' and 'Insignia' (if available) in a contrasting color or by decal on both sides of the vehicle in long radius elliptical arches above and below the lettering center line. The size of the lettering will be a minimum of 2½-inches to a maximum of 6-inches. Reflective lettering is allowed if the material is the same as that which is used for the reflective stripe (as specified in AC 150/5210-5).

3.1.3 Vehicle identification plate. A permanently marked identification plate will be securely mounted at the driver's compartment. The identification plate will contain the following information:

a. NOMENCLATURE

b. MANUFACTURER'S MAKE AND MODEL

c. MANUFACTURER'S SERIAL NUMBER

d. VEHICLE CURB WEIGHT: kg (pounds)

e. PAYLOAD, MAXIMUM: kg (pounds)

f. GROSS VEHICLE WEIGHT (GVW): kg (pounds)

g. FUEL CAPACITY AND TYPE: gals (gallons)

h. DATE OF DELIVERY (month and year)

i. WARRANTY (months and km (miles))

j. CONTRACT NUMBER

k. PAINT COLOR AND NUMBER

A second permanently marked information data plate will be securely mounted on the interior of the driver's compartment. The plate will contain the information required by NFPA 414, Standard for Aircraft Rescue and Fire Fighting Vehicles (2007 Edition), Section 1.3.5 Vehicle

Information Data Plate. A single plate that combines or contains the information required for both plates is acceptable.

3.1.4 Environmental conditions.

3.1.4.1 Vehicle operation and storage temperature conditions will vary with geographical location. Thus, the locality temperature range can go from -40° to 110°F. Refer to NFPA 414 for vehicle winterization criteria.

3.1.4.2 Extreme temperature range. The vehicle will be capable of satisfactory storage and operation in temperatures ranging from -40° to 110°F. The vehicle will be equipped with a cab, chassis, and agent winterization system, permitting operation at -40°F. The winterization system will not detract from the performance of the vehicle or the firefighting system in ambient temperatures up to 110°F. The vehicle chassis winterization system will maintain the engine coolant, lubricants, fuel, and electrical systems operational at ambient temperatures of -40°F. The vehicle agent winterization system will provide sufficient insulation and heating capacity, by means of hot circulating liquids and/or forced air heat exchangers, to permit satisfactory operation of the vehicle and firefighting systems for a 2-hour period at ambient temperatures as low as -40° F with the vehicle fully operational and the engine running. At the end of this 2-hour period, the vehicle will be capable of successfully discharging its agents. All compartments not winterized will be marked as such on the interior of the compartment. The marking will state that the compartment is not winterized and cannot be used for the storage of items capable of freezing.

3.1.5 Reduction of potential foreign object damage. All loose metal parts, such as pins, will be securely attached to the vehicle with wire ropes or chains. Removable exterior access panels, if provided, will be attached with captive fasteners.

3.1.6 Vehicle Mobility.

3.1.6.1 Operating terrain. The vehicle will be capable of operating safely on paved roads, graded gravel roads, cross country terrain, and sandy soil environments. Cross country terrain consists of open fields, broken ground, and uneven terrain. An off-road, high-mobility suspension system resulting in no more than 0.5 $G_{rms}$ acceleration at the driver's seat of the vehicle when traversing an 8-inch (20 cm) diameter half round at 35 mph (56 kph) must be provided. The suspension design by which the manufacturer meets the suspension performance requirements is at the manufacturer's discretion.

3.1.6.2 Gradeability. The fully loaded vehicle will be able to ascend any paved slope up to and including 50-percent.

3.1.6.3 Side slope stability. The fully loaded vehicle will be stable on a 30° side slope when tested in accordance with NFPA 414.

3.1.6.4 Cornering stability. The fully loaded vehicle will be stable in accordance with NFPA 414 when tested in accordance with NFPA 414.

3.2 Weights and dimensions.

3.2.1 Overall dimensions. The maximum dimensions listed below are desirable to ensure vehicles can be accommodated in existing fire stations. Likewise, the overall dimensions should be held to a minimum that is consistent with the best operational performance of the vehicle and the design concepts needed to achieve this performance and to provide maximum maneuverability in accordance with NFPA 414.

| **Vehicle Capacity /Dimensions** | **1500 Gallon** |
|---|---|
| Length (inches/cm) | 433/1100 |
| Width (inches/cm, excluding mirrors) | 124/315 |
| Height (inches/cm) | 154/391 |

**NOTE:** *For Airport Operator Validation: Consult AC 150/5210-15, Aircraft Rescue and Fire Fighting Station Building Design, Appendix A, to ensure vehicles measurements do not exceed existing airport fire station dimensions.*

**VEHICLE MEASUREMENT VALIDATION**

Not applicable.

**ADO/FAA Approval:** ⇨_____

3.2.2 Angles of approach and departure. The fully loaded vehicle will have angles of approach and departure of not less than 30°.

3.2.3 Field of vision. The vehicle will have a field of vision in accordance with NFPA 414.

3.2.3.1 Mirrors. Combination flat and convex outside rearview mirrors will be installed on each side of the cab. The flat mirrors will be of the motorized remote control type, providing not less than 60° horizontal rotational viewing range. The flat mirrors will also have electrically heated heads. Mirror remote and heating controls will be located on the instrument panel within reach of the seated driver. To provide the driver a clear view of the area ahead of the vehicle and to eliminate potential blind spots, a rectangular mirror will be installed on the lower corner of each side of the windshield, having a minimum area of 35 square inches.
The vehicle will have a back-up (rear-view) camera with a display monitor mounted above the driver in the cab. Cameras and monitors that are designed to replace the function of the side-view mirrors are not an approved option in this specification.

3.3 Chassis and vehicle components.

3.3.1 Engine. The vehicle will have a turbocharged diesel engine that is certified to comply with the Environmental Protection Agency (EPA) and state laws for off-highway emission requirements at the time of manufacture. The engine and transmission must operate efficiently and without detrimental effect to any drive train components when lubricated with standard, commercially available lubricants according to the recommendations of the engine and transmission manufacturers.

3.3.1.1 Acceleration. The fully loaded vehicle will accelerate from 0 to 50 miles per hour (mph) on a level paved road within: 25 seconds.

3.3.1.2 Maximum speed. The fully loaded vehicle will attain a minimum top speed of 70 mph on a level, paved road.

3.3.1.3 Pump and roll on a 40-percent grade. The fully loaded vehicle will be capable of pump and roll operations on a paved, dry, 40-percent grade in accordance with NFPA 414.

3.3.1.4 Altitude. Where justified, the vehicle, including the pumping system, will be designed for operation at 2,000 feet above sea level.

| **JUSTIFICATION** |
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| **ADO/FAA Approval:** ⇨_____ |

3.3.2 Engine cooling system. The engine cooling system will be in accordance with NFPA 414. A label will be installed near the engine coolant reservoir reading "Engine Coolant Fill."

3.3.3 Fuel system. The fuel system will be in accordance with NFPA 414.

3.3.3.1 Fuel priming pump. The vehicle will be equipped with an electric or pneumatic fuel pump in addition to the mechanical fuel pump. The electric/pneumatic pump will be used as a priming pump capable of re-priming the engines fuel system.

3.3.3.2 Fuel tank. The vehicle will have one or two fuel tanks with a minimum usable capacity in accordance with NFPA 414, as amended by NFPA 414. Each tank will have a fill opening of 3 inches minimum, readily accessible to personnel standing on the ground and designed to prevent fuel splash while refueling. Each tank will be located and mounted so as to provide maximum protection from damage, exhaust heat, and ground fires. If more than one tank is furnished, means will be provided to assure equalized fuel level in both tanks. An

overturn fuel valve will be provided for each tank to prevent spillage in the event of a rollover. Each fuel tank must be prominently labeled "Diesel Fuel Only".

3.3.4 Exhaust system. The exhaust system will be in accordance with NFPA 414. The exhaust system will be constructed of high grade rust resistant materials and protected from damage resulting from travel over rough terrain. The muffler(s) will be constructed of aluminized steel or stainless steel. Exhaust system outlet(s) will be directed upward or to the rear, away from personnel accessing equipment compartments and the engine air intake, and will not be directed toward the ground.

3.3.5 Transmission. A fully automatic transmission will be provided. The transmission will be in accordance with NFPA 414.

3.3.6 Driveline. The vehicle driveline will be in accordance with NFPA 414. If the driveline is equipped with a differential locking control, a warning/caution label will be placed in view of the driver indicating the proper differential locking/un-locking procedures. The operator's manual will also include a similar warning/caution. All moving parts requiring routine lubrication must have a means of providing for such lubrication. There must be no pressure lubrication fittings where their normal use would damage grease seals or other parts.

3.3.7 Axle capacity. Each axle will have a rated capacity, as established by the axle manufacturer, in accordance with NFPA 414.

3.3.8 Suspension. The suspension system will be in accordance with NFPA 414 and AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles.

3.3.9 Tires and wheels. Tires and wheels will be in accordance with NFPA 414. The vehicle will be equipped with single tires and wheels at all wheel positions. The vehicle will be equipped with tubeless steel belted radial tires with non-directional on/off-road type tread mounted on disc wheel assemblies. Tire and wheel assemblies will be identical at all positions. Tires and wheels will be certified by the manufacturer for not less than 25 miles of continuous operation at 60 mph at the normal operational inflation pressure. A spare tire and wheel assembly will be provided; however, the spare tire and wheel assembly are not required to be mounted on the vehicle. Tires will be new. Retreads, recaps, or re-grooved tires will not be permitted.

Tire bead locks, where justified, may be installed on all tires and rims.

| **JUSTIFICATION** |
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| **ADO/FAA Approval:** ⇨_____ |

3.3.10 Towing connections. The vehicle will be equipped with towing connections in accordance with NFPA 414. The vehicle will be designed for flat towing; the capability to lift and tow the vehicle is not required. The tow connections may intrude into the 30 degree approach angle.

3.3.11 Brake system. The vehicle will be equipped with a multi-channel all-wheel antilock brake system with at least one channel for each axle. The brakes will be automatic, self-adjusting and fully air-actuated. Brakes will be in accordance with CFR 49 CFR 393.40 through 393.42(b)), 393.43, and 393.43 through 393.52. The braking system, complete with all necessary components will include:

a. Air compressor having a capacity of not less than 16 standard cubic feet per minute (SCFM).

b. Air storage reservoir(s), each tank equipped with drain (bleed) valves, and with safety and check valves between the compressor and the reservoir tank.

c. Automatic moisture ejector on each air storage reservoir. Manual air tank drains are acceptable if they are labeled, are centrally located in one compartment and are accessible by an individual standing at the side of the vehicle.

d. Automatic slack adjusters on cam brakes or internal self-adjusting brakes on wedge brakes on all axles.

e. Spring set parking brakes.

All components of the braking system will be installed in such a manner as to provide adequate road clearance when traveling over uneven or rough terrain, including objects liable to strike and cause damage to the brake system components. No part of the braking system will extend below the bottom of wheel rims, to ensure, in case of a flat tire, that the weight of the vehicle will be supported by the rim and the flat tire and not be imposed on any component of the braking system. Slack adjusters and air chambers will be located above the bottom edge of the axle carrier.

3.3.11.1 Air dryer. A replaceable cartridge desiccant air dryer will be installed in the air brake system. The dryer will have the capability of removing not less than 95 percent of the moisture in the air being dried. The dryer will have a filter to screen out oil and solid contaminants. The dryer will have an automatic self-cleaning cycle and a thermostatically controlled heater to prevent icing of the purge valve.

3.3.11.2 Compressed air shoreline or vehicle-mounted auxiliary air compressor. A flush mounted, check valved, auto-eject compressed air shoreline connection will be provided to maintain brake system pressure while the vehicle is not running. The shoreline will be flush mounted (not to extend outside the body line), located on the exterior of the vehicle, either on the left side rear corner of the cab, or at the rear of the vehicle. In lieu of a compressed air shoreline connection, the vehicle may be equipped with a 110 volt shoreline connected vehicle-mounted auxiliary air compressor. In lieu of a compressed air shoreline connection, the vehicle may be equipped with an electrical shoreline connected vehicle mounted auxiliary air compressor.

3.3.12 Steering. The vehicle will be equipped with power steering. Rear-wheel steering technology is not an approved vehicle option.

3.3.12.1 Steering effort. The steering system performance will be in accordance with NFPA 414.

3.3.12.2 Turning diameter. The fully loaded vehicle will have a wall to wall turning diameter of less than three times the overall length of the vehicle in both directions in accordance with NFPA 414.

3.3.13 License plate bracket. A lighted license plate bracket will be provided at the left rear and left front of the vehicle. The location of the left front bracket will be placed so as not to interfere with the operation of fire fighting systems.

3.4 Cab. The vehicle will have a fully enclosed two door cab of materials which are corrosion resistant, such as aluminum, stainless steel, or glass reinforced polyester construction. Steps and handrails will be provided for all crew doors, and at least one grab handle will be provided for each crew member, located inside the cab for use while the vehicle is in motion. The lowermost step(s) will be no more than 22 inches above level ground when the vehicle is fully loaded. A tilt and telescoping steering column will be provided.

3.4.1 Windshield and windows. The windshield and windows will be of tinted safety glass. Each door window will be capable of being opened far enough to facilitate emergency occupant escape in the event of a vehicle accident. The vehicle windows will have an electric control system.

3.4.2 Cab interior sound level. The maximum cab interior sound level will be in accordance with NFPA 414.

3.4.3 Instruments and controls. All instruments and controls will be illuminated and designed to prevent or produce windshield glare. Gauges will be provided for oil pressure, coolant temperature, and automatic transmission temperature. In addition to the instruments and controls required by NFPA 414, the following will be provided within convenient reach of the seated driver:

a. Master warning light control switch,

b. Work light switch(es), and

c. Compartment "Door Open" warning light and intermittent alarm that sounds when a compartment door is open and the parking brakes are released or the transmission is in any position other than neutral.

3.4.4 Windshield deluge system. The vehicle will be equipped with a powered windshield deluge system. The deluge system will be supplied from the agent water tank and will have an independent pumping system. The deluge system activation switch will be located within reach of the seated driver and turret operator.

3.4.5 Forward Looking Infrared (FLIR). A forward looking infrared (FLIR) camera and in-cab monitor, meeting the requirements of NFPA 414, will be provided. In addition, the FLIR monitor described in NFPA 414 will have a minimum dimension of 10 in (25 cm) (measured diagonally) and be located in a position where it is visible to both the seated driver and turret operator.

3.4.6 Climate control system. The offeror/contractor's standard heater/defroster and air conditioning system will be provided. The climate control system will induct at least 60 cubic feet per minute of fresh air into the cab. Cab mounted components will be protected from inadvertent damage by personnel.

3.4.7 Seats. The driver seat will be adjustable fore and aft and for height. The turret operator's seat, located to the right front of the driver's seat, will be a fixed (non-suspension) type. Each seat will be provided with a Type 3 seat belt assembly (i.e., 3-point retractable restraint) in accordance with CFR 49 CFR 571.209. Seat belts must be of sufficient length to accommodate crew members in full Personal Protective Equipment (PPE).

3.4.7.1. Seat Options. Two types of seat options are allowed in the vehicle. A standard seat contains a hard/fixed back. For these seats, a remote-mounted bracket designed to store a Self–Contained Breathing Apparatus (SCBA) will be provided. The remote-mounted bracket for the driver and turret operator (at a minimum) must be placed inside the cab. The brackets for seat positions #3 and #4 may be placed outside of the cab if necessary. An SCBA seat, on the other hand, contains an opening which can accommodate someone wearing an SCBA. The chart below represents the user's stated preference for the vehicle seating configuration.

| Position | Standard | SCBA-Seat | N/A |
|---|---|---|---|
| **Driver** | | X | |
| **Turret** | | X | |
| **# 3** | | X | |
| **# 4** | | | X |

| JUSTIFICATION |
| --- |
| For carriage of personnel and scba storage |

**ADO/FAA Approval:** ⇨_____

3.4.8 Windshield wipers and washer. The vehicle will be equipped with electrically powered windshield wipers. The wiper arms and blades will be of sufficient length to clear the windshield area described by SAE J198, Windshield Wiper Systems - Trucks. Individual wiper controls will include a minimum of two speed settings and an intermittent setting. The wiper blades will automatically return to a park position, out of the line of vision. The vehicle will be equipped with a powered windshield washer system, including an electric fluid pump, a minimum one gallon fluid container, washer nozzles mounted to the wiper arms (wet arms), and a momentary switch.

3.4.9 Warning signs. Signs that state "Occupants must be seated and wearing a seat belt when apparatus is in motion" will be provided in locations that are visible from each seated position in accordance with NFPA 414."

3.4.10 Lateral accelerometer and/or stability control system. The vehicle will be equipped with a lateral accelerometer and/or an electronic stability control system in accordance with NFPA 414.

3.4.11 Monitoring and Data Acquisition System (MADAS). The vehicle will be equipped with a MADAS as prescribed by NFPA 414.

3.5 Body, compartments, and equipment mounting.

3.5.1 Body. The vehicle will have a corrosion-resistant body.

3.5.2 Compartments. The vehicle body will have lighted compartments in accordance with NFPA 414 with a minimum of 10 cubic feet of enclosed storage space.

3.5.2.1 Compartment doors. Storage compartments will have clear anodized aluminum, counterbalanced, non-locking, roll-up or single hinged doors as determined by the manufacturer. Door latch handles on roll-up doors will be full-width bar type. Door straps will be provided to assist in closing the compartment doors when the rolled up or hinged door height exceeds six feet above the ground.

3.5.2.2 Scuffplates. Replaceable scuffplates will be provided at each compartment threshold to prevent body damage from sliding equipment in and out of the compartments. The scuffplates will be securely attached to the compartment threshold but will be easily replaceable in the event of damage.

3.5.2.3 Drip rails. Drip rails will be provided over each compartment door.

3.5.2.4 Shelves. An adjustable and removable compartment shelf will be provided for every 18 inches of each vertical storage compartment door opening. Shelving adjustments will require no more than common hand tools, and will not require disassembly of fasteners. Shelves will support a minimum of 200 pounds without permanent deformation. Each shelf will be accessible to crew members standing on the ground or using a pull out and tip-down configuration. Each shelf will have drain holes located so as to allow for drainage of any water from the stowed equipment.

3.5.2.5 Drainage mats. Each compartment floor and shelf will be covered with a removable black mat designed to allow for drainage of any water from the stowed equipment.

3.5.3 SCBA storage tubes. A single compartment or tubes for storage of four SCBA bottles will be provided. If tubes are provided, two will be installed on each side of the vehicle. The tubes will be of sufficient size to accommodate the procuring agencies SCBA cylinders.

3.5.4 Ladder, handrails, and walkways. Ladder, stepping, standing, and walking surfaces will be in accordance with NFPA 414. Handrails will be provided in accordance with NFPA 414. The lowermost step(s) or ladder rungs will be no more than 22 inches (56 cm) above level ground when the vehicle is fully loaded. The lowermost steps may extend below the angle of approach or departure or ground clearance limits if they are designed to swing clear. The tread of the bottom steps must be at least 8 inches (20 cm) in width and succeeding steps at least 16 inches (40 cm) in width. The full width of all steps must have at least 6 inches (15 cm) of unobstructed toe room or depth when measured from, and perpendicular to, the front edge of the weight-bearing surface of the step.

3.5.5 Ancillary equipment. Ancillary equipment listed in NFPA 414 A.4.2.1 (1)-(17) is not covered by this Procurement Specification in accordance with AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles. Ancillary equipment is funded separately by other sources.

**NOTE:** Equipment funding will be obtained as a separate contract under the provisions of AC 150/5210-14, Aircraft Rescue and Fire Fighting Equipment, Tools, and Clothing.

3.6 Agent system.

3.6.1 Agent (fire) pump. The vehicle will be equipped with a centrifugal pump capable of providing the performance specified herein as prescribed by NFPA 414.

3.6.1.1 Agent system piping. All piping, couplings, and valves and associated components that come into contact with the agent will be in accordance with NFPA 414.

3.6.1.2 Tank to pump connection. A check valve and shutoff valve will be provided in each tank to pump line.

3.6.1.3 Piping, couplings, and valves. All agent system piping will conform to NFPA 414 criteria.

3.6.1.4 Overheat protection. The agent system will be equipped with an overheat protection system in accordance with NFPA 414. Overheat protection is not required on vehicles utilizing a pre-mixed pressurized foam system.

3.6.1.5 Pressure relief valves. The agent system will be equipped with pressure relief valves in accordance with NFPA 414.

3.6.1.6 Drains. The agent system will be equipped with a drainage system in accordance with NFPA 414.

3.6.2 Water tank. The vehicle will have a water tank with a manufacturer certified minimum capacity of at least 1500 gallons.

3.6.2.1 Water tank construction. The water tank will be constructed of passivated stainless steel, polypropylene, or Glass Reinforced Polyester (GRP) construction. All materials used will be capable of storing water, foam concentrate, and water/AFFF solutions.

3.6.2.2 Water tank overhead fill cover and drain. The water tank will be equipped with a 20 inch fill tower. The tower will be designed to allow for video inspection of the water tank interior. The water tank will incorporate a drainage system in accordance with NFPA 414.

3.6.2.3 Water tank overflow system and venting. The water tank will incorporate a venting system to relieve pressure on the tank during fill and discharge operations at maximum flow rates. It will have an overflow system to relieve excess fluid in the event of tank overfill. Drainage from the vent and overflow system will not flow over body panels or other vehicle components and will not be in the track of any of the tires. Tank vent hoses will be of the non-collapsible type.

3.6.2.4 Water tank top fill opening. A top fill opening of not less than 8 inches internal diameter with a readily removable ¼-inch mesh strainer will be provided. The fill opening may be incorporated as part of the manhole cover, and will be sized to accommodate a 2½-inch fill hose.

3.6.2.5 Water tank fill connections. The water tank will incorporate National Hose thread connections and will be in accordance with NFPA 414. If the vehicle is fitted with the "structural fire fighting capability option," the additional requirements listed in paragraph 3.6.8 must be incorporated.

3.6.3 Foam system. (**NOTE**: *The requirements of section 3.6.3 do not apply to pre-mixed pressurized foam systems.*)

3.6.3.1 Foam concentrate tank. The foam concentrate tank(s) will have a manufacturer certified working capacity sufficient for two tanks of water at the maximum tolerance specified in NFPA 412, Standard for Evaluating Aircraft Rescue and Fire-Fighting Foam Equipment for 3 to 6 percent foam concentrate (i.e., 7.0-percent).

3.6.3.1.1 Foam tank construction. The foam tank will be constructed of passivated stainless steel, polypropylene, or GRP construction. All materials used will be capable of storing foam concentrate.

3.6.3.1.2 Foam tank drain. The foam tank will incorporate a drain and drain valve. The valve will be on the left side of the vehicle and controlled by a crew member standing on the ground. The drain line will have a minimum 1½-inch I.D. The foam tank drain outlet will be located so that the contents of the tank can be drained into 5-gallon cans and 55-gallon drums.

3.6.3.1.3 Foam tank top fill trough. The foam tank will incorporate a top fill trough mounted in the top of the tank readily accessible to at least two crew members on top of the vehicle. The top fill trough will incorporate a cover, latch, and sealed so as to prevent spillage under any operating condition. The top fill trough will be designed to allow two standard 5-gallon foam concentrate containers to be emptied simultaneously. The top fill trough neck will extend sufficiently close to the bottom of the tank to reduce foaming to a minimum during the fill operation. The top fill trough will incorporate readily removable, rigidly constructed 10 mesh stainless steel, brass or polyethylene strainers. All components in and around the top fill trough will be constructed of materials that resist all forms of deterioration that could be caused by the foam concentrate or water.

3.6.3.2 Foam tank fill connections. The foam tank will incorporate a 1.5-inch National Hose thread female hose connection on both sides of the vehicle to permit filling by an external transfer hose at flow rates up to 25-gpm. The connections will be provided with chained-on long handled plugs or rocker lug plugs. The top of the connections will be no higher than 48 inches above the ground and readily accessible. The fill lines will incorporate check valves and readily removable, rigidly constructed ¼-inch mesh strainers. All components in the foam tank fill system will be constructed of materials that resist all forms of deterioration that could be caused by the foam concentrate or water.

3.6.3.2.1 Foam tank vent and overflow system. The foam tank will incorporate a vent system to relieve pressure on the tank during fill and discharge operations at maximum flow rates and an overflow system to relieve excess liquid in the event of tank overfill. Drainage from the vent and overflow system will not flow over body panels or other vehicle components and will not be in front of or behind any of the tires. Tank vent hoses will be of the non-collapsible type.

3.6.3.3 Foam transfer pump. A foam transfer pump will be provided and mounted in a compartment on the vehicle. The pump will be capable of transferring and drawing foam liquid concentrate at adjustable flow rates up to 25-gpm directly through the pump and loading

connections (see 3.6.3.2). All materials and components that come in contact with the foam will be compatible with the foam concentrate. The pump and its plumbing will have provisions for flushing with water from the water tank. A suitable length of hose with appropriate connections will be provided for filling the foam tank from an external foam storage container.

3.6.3.4 Foam flushing system. The foam concentrate system will be designed in accordance with NFPA 414 so that the system can be readily flushed with clear water.

3.6.3.5 Foam concentrate piping. All metallic surfaces of the piping and associated components that come into contact with the foam concentrate will be of brass, bronze, or passivated stainless steel. The foam concentrate piping will be in accordance with NFPA 414.

3.6.4 Foam proportioning system. The vehicle will have a foam proportioning system for Aqueous Film-Forming Foam (AFFF) (whether 3- or 6-percent foam concentrate) in accordance with NFPA 414. If a fixed orifice plate system is used, a plate will be provided for each percentage foam concentrate; the additional plate will be securely mounted in a protected location on the vehicle. A fire vehicle mechanic will be able to interchange the plates using common hand tools.

3.6.5 Primary vehicle turret. The vehicle will be equipped with a standard roof-mounted turret, high reach extendable turret, and/or high flow bumper mounted turret to serve as the primary source of agent delivery, as specified below:

3.6.5.1 Roof turret. The roof turret will be mounted near the front of the roof of the vehicle. It will have a non-air-aspirating, constant flow, variable stream nozzle with dual flow rates for foam or water rated as specified in NFPA 414. The discharge pattern will be infinitely variable from straight stream to fully dispersed. The roof turret will be power operated; power controls will be positioned for use by the driver and the crew member seated to the right of the driver. The type of nozzle or turret drain will be per the manufacturer's recommendation.

3.6.6 Bumper turret. The vehicle will be equipped with a joystick controlled, constant flow, non-air-aspirating, variable stream type:
fixed mount low volume single rate (minimum 250 GPM) bumper turret.
The bumper turret will be capable of discharging at a minimum flow rates of foam or water as specified by the user, with a pattern infinitely variable from straight stream to fully dispersed. The bumper turret will be capable of automatic oscillation, with the range of oscillation adjustable up to 90° each side of center (left and right) with vertical travel capabilities of +45°/-20° meeting section 4.20.2 in NFPA 414.

3.6.7 Preconnected handline(s). Two 200 foot, 1¾-inch pre-connected woven jacket handline(s), with a 1½-inch control valve and a pistol grip nozzle, will be located on (or accessible from) each side of the vehicle. A safety system will be provided to prevent charging of the hose until the hose has been fully deployed. The handline(s) and nozzle(s) will be in accordance with NFPA 414, and will allow for a minimum of 95 gpm at 100 psi nozzle pressure. A control for charging each handline will be provided for operation by both the driver and the turret operator.

3.6.7.1 In addition, the vehicle will be equipped with the following handline: 100 feet of twinned 1-inch dry chemical / foam-water hose on a reel.

3.6.8. Structural fire fighting capability. The vehicle will be equipped with an agent system structural control panel, on the left side of the vehicle, operable while standing on the ground. Structural panel activation will be interlocked to operate only with the vehicle parking brakes set and the transmission in neutral position. Controls and instruments will be grouped by function. The control panel will be hinged or accessible from the rear for maintenance. Instruments will be lighted for night operation.

3.6.8.1 The structural panel will include, as a minimum, the following:

a. Panel activation switch, including the panel lights.

b. Engine tachometer.

c. Engine oil pressure gauge with low pressure warning light.

d. Engine coolant temperature gauge with high temperature warning light.

e. A liquid filled gauge, or digital indicator for pump suction, -30 inches Hg vacuum to 600 psi.

f. A liquid filled gauge, or digital indicator for pump pressure, 0 to 600 psi.

g. An adjustable pump pressure using either an electronic pressure governor or manual control with a relief valve will be provided.

h. Foam or water selection.

i. Water and foam tank liquid level indicators, located adjacent to the water and foam tank fills.

3.6.8.2 The structural fire fighting capability will also require installation of the following items:

a. A priming pump and control (for drafting using the large intake connection).

b. Water tank isolation valve.

c. Discharge connections. Two 2½-inch discharge connections with male National Hose threads will be provided. One 2½-inch discharge will be provided on each side of the vehicle. Each connection will be equipped with a cap, a quarter-turn control valve, a bleeder valve, and a pressure gauge. Each connection will be rated at 250-gpm minimum.

d. Intake connections. The vehicle will be equipped with one valved 4½-inch intake connection on the left side. The vehicle will be equipped with one valved 2½-inch intake connection on the left side adjacent to the 4½-inch intake connection with both having either a 30° or 45° turn-down fitting. The 4½-inch intake connection will have male National Hose threads, a quarter-turn control valve, a bleeder valve, a strainer, and a cap. The 2½-inch intake connection will have rocker lug female National Hose threads, a quarter-turn control valve, a bleeder valve, a strainer, and a plug. The vehicle will be capable of filling its water tank by pumping from a draft, a hydrant, or a nurse truck through either of the intake connections without the use of a hose from a discharge connection to a tank fill connection.

3.6.9 Primary turret discharge nozzle. The vehicle will be equipped with a complementary agent discharge mounted parallel to the AFFF solution discharge on the primary turret mounted on the cab roof.

3.7 Dry chemical agent system. The vehicle will be equipped with a 500 lb minimum capacity sodium based dry chemical agent system. The propellant gas cylinder will be replaceable within fifteen minutes by two crew members standing on the ground and be equipped with a cylinder replacement hoisting system. The propellant gas cylinder will be secured to withstand off-road operations. A pressure indicator will be visible to any person opening the tank fill cap. Blow-down piping will be directed beneath the vehicle. The dry chemical agent tank will include lifting rings and will have a nameplate indicating, as a minimum, the following:

a. Extinguishing agent.
b. Capacity.
c. Weight full.
d. Weight empty.
e. Operating pressure.
f. Hydrostatic test date.
g. Type of agent required for re-servicing.

3.7.1 Not applicable.

3.7.2 Dry chemical hose reel. A hose reel, equipped with at least 100 feet of dry chemical hose, will be mounted in a compartment. Handline agent and purge controls will be mounted in or adjacent to the compartment. All electrical components will be sealed against entry of water. The hose reel will have both electric and manual rewind provisions. The manual rewind handle will be bracket mounted and stored in the compartment. A quick acting control will be provided to activate the handline from the cab of the vehicle.

3.8 Not applicable.

3.9 Electrical systems and warning devices. The vehicle will have a 12-volt or 24-volt electrical and starting system in accordance with NFPA 414.

3.9.1 Alternator. An appropriate charging system, in accordance with NFPA 414, will be provided. The minimum continuous electrical load will include operation of the air conditioning system.

3.9.2 Batteries. Batteries will be of the maintenance-free type; addition of water will not be required during normal service life. The battery cover and vent system will be designed to prevent electrolyte loss during service and to keep the top of the battery free from electrolyte.

3.9.2.1 Battery compartment. The batteries will be enclosed in a weatherproof enclosure, cover, or compartment and be readily accessible.

3.9.3 Battery charger or conditioner. The vehicle will have a DC taper type battery charger or an automatic battery conditioner, or voltage monitoring system, providing a minimum 12 amp output. The charger/conditioner will be permanently mounted on the vehicle in a properly ventilated, accessible location. The charger/conditioner will be powered from the electrical shoreline receptacle (see 3.10.1). A charging indicator will be installed next to the receptacle. When a battery conditioner is provided, the conditioner will monitor the battery state of charge and, as necessary, automatically charge or maintain the batteries without gassing, depleting fluid level, overheating, or overcharging. A slave receptacle will be provided at the rear or on either side of the vehicle cab. Battery jump studs may be installed on the exterior of the battery box in lieu of a slave receptacle.

3.9.4 Electromagnetic interference. The vehicle electrical system will be in accordance with SAE J551-2 for electromagnetic interference.

3.9.5 Work lighting.

3.9.5.1 Cab interior lights. Cab interior light levels will be sufficient for reading maps or manuals. At least one red and one white cab interior dome light will be provided.

3.9.5.2 Compartment lights. White lighting sufficient to provide an average minimum illumination of 1.0 footcandle will be provided in each compartment greater than 4.0 cubic feet and having an opening greater than 144 square inches. Where a shelf is provided, this illumination will be provided both above and below the shelf. All compartments will be provided with weatherproof lights that are switched to automatically illuminate when compartment doors are opened and the vehicle master switch is in the 'on' position. Light switches will be of the magnetic (non-mechanical) type.

3.9.5.3 Ladder, step, walkway, and area lights. Non-glare white or amber lighting will be provided at ladders and access steps where personnel work or climb during night operations. In addition, ground lighting will be provided. Ground lights will be activated when the parking brake is set in accordance with AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles. These area lights will be controlled with three-way switches on the cab instrument panel and near the light sources. The switch located in the cab will be a

master switch and must be turned on before auxiliary switches near the light sources are operational.

3.9.5.4 Spot/Floodlights. Two spot/floodlights will be attached at the end of the primary turret or at the end of the HRET assembly. The lights will illuminate the area covered by the turret. Both lights will be controlled from switches in the cab. HID lights will be used.

3.9.5.5 Flood Lights. Two telescoping floodlights will be provided. One light will be mounted on the left and right sides of the vehicle. 200W HID lights will be used. Both lights will be mounted on extension tubes and controlled from switches in the cab and manually raised. To prevent these lights from accidental damage, the cab will be equipped with a visual warning signal to alert the driver if the lights are inadvertently left in the "up" position.

3.9.5.6 Scene Lights. A total of six high mounted floodlights will be provided to illuminate the work areas around the vehicle. Two lights will be mounted on the front and two will be mounted on each side of the vehicle. The lights will be powered by the vehicle alternator driven system or auxiliary generator, and the lights in the front will be controlled from switches in the cab. HID lights will be used.

3.9.6 Audible warning devices.

3.9.6.1 Siren. The vehicle will be equipped with an electronic siren system. The amplifier unit will include volume control and selection of "Radio," "PA," "Manual," "Yelp," "Wail," and "Hi-Lo" (European) modes, and a magnetic noise canceling microphone. The amplifier, microphone, and controls will be within reach of the driver and the turret operator. Siren activating foot switches will be located in front of the driver and the turret operator. The siren speaker will be rated at 100 watts minimum and will be located in a guarded position as low and as far forward on the vehicle as practical.

3.9.6.2 Horn. Dual forward facing air horns will be installed in protected locations near the front of the vehicle. Air horn activating foot switches will be located in front of the driver and the turret operator.

3.9.7 Emergency warning lights. All emergency warning lights must meet the requirements of AC 150/5210-5. Where applicable, halogen lights will be used as the primary light type. Lighting units will be installed on the top front, sides, and rear of the vehicle to provide 360° visibility. A switch will be provided on the instrument panel to control all of the top, side, front and rear emergency warning lights. A switch will also be provided on the instrument panel to disable all lower emergency warning lights when desired. All lighting systems will meet NFPA 414 emergency lighting criteria.

3.9.7.1 Emergency warning light color. All emergency warning lights will meet the requirements of AC 150/5210-5.

3.9.7.2 Headlight flashing system. A high beam, alternating/flashing, headlight system will be provided. The headlight flasher will be separately switched from the warning light panel. All emergency warning lights will meet the requirements of AC 150/5210-5.

3.9.8 Radio circuit. The vehicle will have three separate 30 amp circuits with breakers and connections provided in a space adjacent to the driver and turret operator for installation of radios and other communications equipment after the vehicle has been delivered. To facilitate the installation of the communications equipment the manufacturer will provide three antennas pre-installed on top of the cab. ***Radios are an airport responsibility and not part of this specification.***

3.9.9 Power receptacles.

3.9.9.1 Primary power receptacles. The vehicle will have two duplex 15-amp 110-volt power receptacles, one installed adjacent to the cab door on each side of the vehicle. Each duplex receptacle will include one straight blade and one twist-lock connection. These outlets will be powered by the generator.

3.9.9.2 Auxiliary power receptacles. The vehicle will have 2-12-volt auxiliary power receptacles mounted adjacent to the driver and crew member positions, preferably in the instrument panel.

3.9.9.3 Cable reel. The vehicle will be equipped with an electrical cable reel, located within a compartment. The reel will be equipped with 200 feet of 20 amp, 600 volt, 90°C insulated electrical cable. The electrical cable will be equipped with a rubber ball stop to prevent cable pull through during rewinding operations. A four-way roller guide will be provided on the cable reel to prevent chafing of cable insulation. The cable reel will have an electric rewind motor with provisions for manual rewind in the event of motor failure; the manual rewind handle will be securely stored near the cable reel. A portable weatherproof duplex outlet box, with built-in circuit breakers and twist-lock receptacles, will be provided for on the cable end. The cable reel will be powered by the auxiliary generator.

3.9.10 Auxiliary generator. A minimum 10 kilowatt (kW) (continuous rating), 120/240-volt, 60 hertz, diesel, hydraulic, or split shaft Power Takeoff (PTO)-driven generator will be provided.

3.10 Line voltage electrical system.

3.10.1 Electrical shoreline connection. The battery charger/conditioner will be powered from a covered, polarized, insulated, labeled, recessed (flush mounted), male, 110 volt AC auto-eject receptacle. The connection will be located on the exterior of the vehicle at the rear or on either side of the cab. A weatherproof charge meter will be installed next to the receptacle. A 15 amp rated, 110-120 volt, AC straight blade (non twist-lock) connector will be provided.

3.11 Air systems.

3.11.1 Air hose reel. An air hose reel will be provided in an enclosed compartment on the vehicle. The hose reel will be equipped with 200 feet of 3/8-inch I.D. hoseline. A 3/8 inch National Pipe Taper (NPT) fitting and female style quick disconnect will be connected to the end of the hoseline. A four-way roller guide will be provided for the hose reel to prevent hose chafing and kinking. The hoseline will be equipped with a rubber ball stop to prevent hose pull through on roller guides during rewinding operations. The hose reel will have an electric rewind motor and provisions for manual rewind in the event of motor failure; the manual rewind handle will be securely stored near the hose reel. A pressure protected air supply from the chassis air system will be connected to the hose reel. The air supply lines will be routed with minimum bends and located or guarded from damage from the carried equipment.

3.12 Quality of Workmanship. The vehicle, including all parts and accessories, will be fabricated in a thoroughly workmanlike manner. Particular attention will be given to freedom from blemishes, burrs, defects, and sharp edges; accuracy of dimensions, radii of fillets, and marking of parts and assemblies; thoroughness of welding, brazing, soldering, riveting, and painting; alignment of parts; tightness of fasteners; et cetera. The vehicle will be thoroughly cleaned of all foreign matter.

4. REGULATORY REQUIREMENTS.

4.1 Recoverable Materials. The contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with Title 48: Federal Acquisition Regulations System, Part 2823—Environment, Conservation, Occupational Safety, and Drug-free Workplace, Subpart 2823.4 Use of Recovered Material, 403 Policy and 404 Procedures.

4.2 Green Procurement Program. Green Procurement Program (GPP) is a mandatory federal acquisition program that focuses on the purchase and use of environmentally preferable products and services. GPP requirements apply to all acquisitions using appropriated funds, including services and new requirements. FAR 23.404(b) applies and states the GPP requires 100% of EPA designated product purchase that are included in the Comprehensive Procurement Guidelines list that contains recovered materials, unless the item cannot be acquired:

a. competitively within a reasonable timeframe;

b. meet appropriate performance standards, or

c. at a reasonable price.

The prime contractor is responsible for ensuring that all subcontractors comply with this requirement. Information on the GPP can be found at:
http://www.dot.gov/ost/m60/DOT_policy_letters/apl8_04.pdf or FAR 23.404(b):
http://www.acquisition.gov/far/current/html/Subpart%2023_4.html.

5. PRODUCT CONFORMANCE PROVISIONS.

5.1 Classification of inspections. The inspection requirements specified herein are classified as follows:

a. Performance inspection (see 5.2).

b. Conformance inspection (see 5.3).

5.2 Performance inspection. The vehicle will be subjected to the examinations and tests described in 5.6.3.1 through 5.6.3.5 (if applicable). The contractor will provide or arrange for all test equipment, personnel, schedule, and facilities.

5.3 Conformance inspection. The vehicle will be subjected to the examinations and tests described in 5.6.3.1 through 5.6.3.5 (if applicable). The contractor will provide or arrange for all test equipment, personnel, and facilities.

5.4 Product conformance. The products provided will meet the performance characteristics of this PS, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The purchaser reserves the right to require proof of such conformance.

5.5 Technical proposal. The offeror/contractor will provide an itemized technical proposal that describes how the proposed model complies with each characteristic of this PS; a paragraph by paragraph response to the characteristics section of this PS will be provided. The offeror/contractor will provide two copies of their commercial descriptive catalogs with their offer as supporting reference to the itemized technical proposal. The offeror/contractor will identify all modifications made to their commercial model in order to comply with the requirements herein. The vehicle furnished will comply with the "commercial item" definition of FAR 2.101 as of the date of award. The purchaser reserves the right to require the offeror/contractor to prove that their product complies with the referenced commerciality requirements and each conformance/performance characteristics of this PS.

5.6 Inspection requirements.

5.6.1 General inspection requirements. Apparatus used in conjunction with the inspections specified herein will be laboratory precision type, calibrated at proper intervals to ensure laboratory accuracy.

5.6.2 Test rejection criteria. Throughout all tests specified herein, the vehicle will be closely observed for the following conditions, which will be cause for rejection:

a. Failure to conform to design or performance requirements specified herein or in the contractor's technical proposal.

b. Any spillage or leakage of any liquid, including fuel, coolant, lubricant, or hydraulic fluid, under any condition, except as allowed herein.

c. Structural failure of any component, including permanent deformation, or evidence of impending failure.

d. Evidence of excessive wear.

e. Interference between the vehicle components or between the vehicle, the ground, and all required obstacles, with the exception of normal contact by the tires.

f. Misalignment of components.

g. Evidence of undesirable roadability characteristics, including instability in handling during cornering, braking, and while traversing all required terrain.

h. Conditions that present a safety hazard to personnel during operation, servicing, or maintenance.

i. Overheating of the engine, transmission, or any other vehicle component.

j. Evidence of corrosion.

k. Failure of the fire fighting system and sub-systems.

5.6.3 Detailed inspection requirements.

5.6.3.1 Examination of product. All component manufacturers' certifications, as well as the prototype and production/operational vehicle testing outlined in Table 1, will be examined to verify compliance with the requirements herein. Attention will be given to materials, workmanship, dimensions, surface finishes, protective coatings and sealants and their application, welding, fastening, and markings. Proper operation of vehicle functions will be verified as defined by NFPA 414, Acceptance Criteria chapter. A copy of the vehicle manufacturer's certifications will be provided with each vehicle in accordance with NFPA 414. The airport may accept a manufacturer or third party certification for any/all prototype and production/operational vehicle testing performed prior to delivery which proves that the vehicle meets the performance parameters of NFPA 414.

**Table 1. Vehicle Test Data**

| *NFPA 414 paragraph* | *Test* |
|---|---|
| **Production Vehicle Operational Tests (NFPA 414 - Section 6.4)** | |
| (6.4.1) | Vehicle Testing, Side Slope |
| (6.4.2) | Weight / Weight Distribution |
| (6.4.3) | Acceleration. **NOTE:** *With the modification that the instrumentation must be a GPS-based electronic data collection system.* |
| (6.4.4) | Top Speed |
| (6.4.5) | Brake Operational Test |
| (6.4.6) | Air System / Air Compressor Test |
| (6.4.7) | Agent Discharge Pumping Test |
| (6.4.8) | Dual Pumping System Test (As Applicable) |
| (6.4.9) | Pump and Maneuver Test |
| (6.4.10) | Hydrostatic Pressure Test |
| (6.4.11) | Foam Concentration Test |
| (6.4.12) | Primary Turret Flow Rate Test |
| (6.4.13) | Piercing/Penetration Nozzle Testing (As Applicable) |
| **Prototype Vehicle Tests (NFPA 414 – Section 6.3)** | |
| (6.3.1) | Rated Water and Foam Tank Capacity Test |
| (6.3.2) | Cornering Stability. **NOTE:** *With the modification that the evasive maneuver / double-lane change test must be conducted at 35 mph (56 kph).* |

| *NFPA 414 paragraph* | *Test* |
|---|---|
| (6.3.3) | Vehicle Dimensions |
| (6.3.4) | Driver Vision Measurement |
| (6.3.5) | Pump and Roll on a 40 Percent Grade |
| (6.3.6) | Electrical Charging System |
| (6.3.7) | Radio Suppression |
| (6.3.8) | Gradability Test |
| (6.3.9) | Body and Chassis Flexibility Test |
| (6.3.10) | Service/Emergency Brake Test |
| (6.3.11) | Service/Emergency Brake Grade Holding Test |
| (6.3.12) | Steering Control Test |
| (6.3.13) | Vehicle Clearance Circle Test |
| (6.3.14) | Agent Pump(s)/Tank Vent Discharge Test |
| (6.3.15) | Water Tank Fill and Overflow Test |
| (6.3.16) | Flushing System Test |
| (6.3.17) | Primary Turret Flow Rate Test |
| (6.3.18) | Primary Turret Pattern Test |
| (6.3.19) | Primary Turret Control Force Measurement |
| (6.3.20) | Primary Turret Articulation Test |
| (6.3.21) | Handline Nozzle Flow Rate Test |
| (6.3.22) | Handline Nozzle Pattern Test |
| (6.3.23) | Ground Sweep/Bumper Turret Flow Rate Test |
| (6.3.24) | Ground Sweep/Bumper Turret Pattern Control Test |
| (6.3.25) | Undertruck Nozzle Test |
| (6.3.26) | Foam Concentration/Foam Quality Test |
| (6.3.27) | Warning Siren Test |
| (6.3.28) | Propellant Gas |
| (6.3.29) | Pressure Regulation |
| (6.3.30) | AFFF Premix Piping and Valves |
| (6.3.31) | Pressurized Agent Purging and Venting |
| (6.3.32) | Complementary Agent Handline Flow Rate and Range |
| (6.3.33) | Dry Chemical Turret Flow Rate and Range |
| (6.3.34) | Cab Interior Noise Test |

6. PACKAGING.

6.1 Preservation, packing, and marking will be as specified in the Procurement Specification, contract or delivery order.

6.2 The vehicle must be delivered with full operational quantities of lubricants, brake and hydraulic fluids, and cooling system fluid all of which must be suitable for use in the temperature range expected at the airport.

6.3 The vehicle must be delivered with one complete load of firefighting agents and propellants. One complete load is defined as all of the agents and propellants necessary for the

vehicle to be fully operational. One load would include, at a minimum: one fill of a foam tank; one fill of a dry chemical tank (if applicable); one fill of a halogenated tank (if applicable); one spare nitrogen cylinder for a dry chemical system (if applicable); and one spare argon cylinder for a halogenated system (if applicable). Agents and propellants for required testing or training are not included. For the initial training period, water should be used in place of other extinguishing agents. The manufacturer may pre-ship agents and propellants to a receiving airport to reduce overall procurement costs.

6.4. The vehicle manufacturer must provide initial adjustments to the vehicle for operational readiness and mount any ancillary appliances purchased through the vehicle manufacturer as part of the vehicle.

7. TRAINING.

7.1 Upon delivery of the vehicle to the airport, the manufacturer must, at no additional cost, provide the services of a qualified technician for five consecutive days (or up to 8 days for an high reach extendable turret) for training. This is considered sufficient time for the purchaser to adjust shift work schedules to get maximum employee attendance to training sessions at some point during the training period. During this time sufficient repetitive learning opportunities must be provided by the manufacturer to allow various shifts to complete the training requirements.

7.2 The technician must provide thorough instruction in the use, operation, maintenance and testing of the vehicle. This setup must include operator training for the primary operators, which will give them sufficient knowledge to train other personnel in the functional use of all fire fighting and vehicle operating systems. Prior to leaving the vehicle, the technician should review the maintenance instructions with the purchaser's personnel to acquaint them with maintenance procedures as well as how to obtain support service for the vehicle.

7.3 Training must include written operating instructions, electronic training aids (videos/power point), or other graphics that depict the step-by-step operation of the vehicle. Written instructions must include materials that can be used to train subsequent new operators.

8. REFERENCED DOCUMENTS.

8.1 Source of documents.

8.1.1 The CFR may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402.

Title 14, Code of Federal Regulations (CFR), Part 139, Certification of Airports (14 CFR Part 139)

Section 139.315 Aircraft Rescue and Firefighting: Index Determination.

Section 139.317 Aircraft Rescue and Firefighting: Equipment and Agents.

Section 139.319 Aircraft Rescue and Firefighting: Operational Requirements.

Title 49; Code of Federal Regulations (CFR), Part 393: Parts and Accessories Necessary for Safe Operation: Subpart C—Brakes.

Title 49; Code of Federal Regulations (CFR), Part 571, Motor Carrier Vehicle Safety Standards, Part 209, Standard No. 209; Seat Belt Assemblies

8.1.2 SAE documents may be obtained from SAE, Inc., 400 Commonwealth Drive, Warrendale PA 15096.

8.1.3 National Fire Protection Association (NFPA): NFPA documents may be obtained from NFPA, Batterymarch Park, Quincy MA 02269-9101.

NFPA 412, Standard for Evaluating Aircraft Rescue and Fire-Fighting Foam Equipment (2009 Edition)

NFPA 414, Standard for Aircraft Rescue and Fire Fighting Vehicles (2007 Edition)

NFPA 1901, Standard for Automotive Fire Apparatus (2009 Edition)

8.1.4 Federal Aviation Administration (FAA): FAA ACs may be obtained from the FAA website: http://www.faa.gov/regulations_policies/advisory_circulars/

AC 150/5220-10, Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles

AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport

FAA Orders, Specifications, and Drawings may be obtained from: Federal Aviation Administration, ATO-W CM-NAS Documentation, Control Center, 800 Independence Avenue, SW, Washington, DC 20591. Telephone: (202) 548-5256, FAX: (202) 548-5501 and website: http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/atc_facilities/cm/cm_documentation/

☑ **Print Class 4 Specification**

## SECTION II

## EQUIPMENT and CLARIFICATIONS

**QUESTIONS:**

Questions regarding the specifications shall be submitted in writing to David Crawford, dcrawford@tompkins-co.org no later than **June 25, 2014.** Questions received after June 25, 2014 will not be entertained.

**CAB INTERIOR:**

The cab shall have seats for three crewmembers complete with approved three point seat belts with automatic retractors (911 ABTS SCBA seats w/6 position riser).

A removable or retractable insert (cover) shall be installed in each crew seat position to cover the breathing apparatus bottle.

Provisions for storage of 8 spare 4.5 30min-carbon SCBA cylinders, location to be determined at pre-build.

**HVAC:**

A/C System capable of maintaining ambient temperature less 15° F, during high temperature conditions. The Air Conditioning system shall have a minimum rating of 40,000 BTU'S. Vents shall be ceiling mounted with directional air vents for each seated position for the cab crew personal.

The A/C system shall be driven from the vehicle engine.

Heater/defroster with 200 BTU output per cubic foot of cab space, with blower capacity per minute equal to cab volume, with fresh air intake, and with defroster ducts to the windshield shall be provided.

**EQUIPMENT AND RADIOS:**

The following radios will be installed in a radio cluster within easy reach of the driver or crewmember:

1-Icom IC-A200m
1-Motorola CDM 1550-LS (UHF 403-470Mhz)
1-Motorola CDM 1250 (VHF 136-174Mhz)
1-Motorola CDM 1250 (Low Band 42-50Mhz)
1-Motorola XTL 2500 (800Mhz) with status head
All radios will have aux. Speakers.

**LIGHTING SYSTEM and GENERATOR:**

Exterior lighting shall meet or exceed Federal Department of Transportation (DOT), Federal Motor Vehicle Safety Standards (FMVSS).

Two or more halogen headlights with upper and lower driving beam.
Tail lights/stop lights mounted on each side of the vehicle.

Rear Stop/Tail-Turn light clusters to be the following Whelen
Lightheads mounted in a Whelen Cast 4 housing

Two (2) Whelen 60R00XRR LED Stop/Tail Lights
Two (2) Whelen 60A00TAR Amber Populated Arrow Turn Signal
Two (2) Whelen 60J000CR Halogen back-up Light
Two (2) Whelen 60R00FRR Red Lighthead

Front Turn Indicators are to be mounted on front of cab above headlight clusters.

Two (2) Whelen 60A00TAR Amber Populated Arrow Turn Signal with 6Eflange, One (1) Each Side.

Reflectors, markers, and clearance lights shall be furnished and installed in conformance with the applicable FMVSS.

Compartment lights, non-glare type, arranged to illuminate both sides of the engine and the interior of all access and storage compartments with an individual switch located in each compartment. All lights shall be totally sealed, non-serviceable, and plug in mounting.

Cab entrance step lights shall be totally sealed, non-servicable, mounted on the inside top section of each step.

The rear step lights shall be totally sealed, non-servicable and actuated by a switch in the cab.

Two additional backup lights installed at the rear of the vehicle.

A minimum of two- (2) lights for illumination of the top work deck area for re-servicing the water and foam tanks on the vehicle shall be provided.

The cab dome lights shall be selective between red and/or white illumination.

In addition to the normal vehicle headlight system, two (2) high intensity-driving lights shall be mounted under the front bumper. Lights shall be Hella 550 or equal. A dash-mounted switch shall operate the lights.
There shall be an illuminated license plate bracket mounted at the rear of the vehicle.

Two (2) red halogen gooseneck map lights, one mounted on each side of the dash, shall be provided. (Hella - Model 87141 or equal).

Two (2) halogen floodlights shall be mounted at the rear of the vehicle on the engine enclosure. Floodlights shall be activated automatically when the vehicle is placed in reverse.

A 10 kW (minimum capacity), 110/240 VAC, 60 Hz diesel powered generator, mounted on the vehicle in an enclosed compartment. The engine shall run at 1800 rpm to achieve the rated capacity to assure low noise output and longer unit life. The generator shall draw fuel from the vehicle's common fuel tank. The generator shall be in-cab remote start/stop controlled and also have a light that will indicate when it is running. The engine shall be equipped with glow plugs controlled from the dash panel to assure cold weather starting. The generator shall be equipped with a system that will shut down the unit in event of low engine oil pressure and/or high engine coolant temperature. A low oil pressure warning light and a high engine coolant temperature light, both with a lamp test capability shall be installed in the dash panel.

The following equipment shall be powered by the on-board generator, low voltage switch Controlled, for safety purposes, from the cab dash:

1. Two (2) 600 watt Magnifier wide angle flood lights mounted at the front of the vehicle above the windshield.
2. A Wilburt Night Scan shall be installed on the top of the vehicle with remote controls available from ground level. (Model NS15-5400M/DT)
   A light raised indicator light shall be installed on the dash indicating the light tower is raised.
3. Two- (2) 120 volt AC, 20 amp duplex receptacles with one straight blade and one twist lock, one mounted on each side at the cab area complete with Hubbell weatherproof hinged covers. The electrical receptacles shall be wired to the GFCI circuit breaker box.
4. Holmatro hydraulic power unit (SR 40 electric 230v) with controls in or near hydraulic tools compartment.

The generator shall be wired to a breaker distribution panel. All wiring shall be a minimum of twelve- (12) gauge, stranded copper wire.

One (1) electric cord reels shall be provided with 200 feet of 12/3 SO meeting UL safety standards using safety yellow cord.

The cord reel shall be wired through a 20 amp, 120 volt circuit breaker and have a NEMA L5-15 twist lock at the end of the cable on the reel and receive its power from the generator.

The cord reel shall be mounted in compartment on vehicle. (To be discussed at prebuild)

The cord reel shall be a Hannay reel, equipped with a 12 VDC electric rewind motor, cord stop, and have provisions for a manual rewind. The power rewind switch shall be mounted adjacent to each cord reel.

All electric cord reels shall be provided with cord rollers.

**EMERGENCY WARNING LIGHTS:**

Alternating Head Lights - in high beams

Federal Signal Corp (4) Red Mod-Led -1F
1- LED mounted behind front wheel well both sides of truck on bodyline.
1- LED Mounted in front of rear wheel well on both sides of truck on bodyline.

47" 8 lamp code 3 arrowstick (1) AS-847-HS mounted on the rear truck either above or below the bumper

2) Tomar Model # 675B with red rectangular strobe lights/siren mounted on the inside of the headlights, but above front bumper

1) Code 3 550 Rotating Beacon 550M-Sus (red) mounted rear of fire truck on engine. Cover to be seen from rear and sides on corner.

1) Code 3 550 Rotating Beacon 550N-SW (Amber) mounted rear of fire truck on engine cover opposite of red, must be seen from 360 wired to a separate switch in cab marked rear amber.

**Zone A Upper**

Two (2) Whelen FT2CRCRP Mini Freedom Lightbars to be mounted one (1) each side of cab front. To be set at an angle for maximum light output, to have as little interference with ladder/water tower device as possible.

**Zone B upper**

To be covered by Zone A Upper and Zone C Upper lightheads.

**Zone C upper**

Two (2) Whelen S360 One (1) Red (S360DRP), one (1) Amber Super strobes to be placed on rear corners of apparatus body.

One (1) Whelen S360DAP Superstrobe Amber beacon will be mounted to meet FAA requirements.

**Zone D upper**

See Zone B upper

Lower Zone

**Zone A Lower**

Two (2) Whelen FT2CRCRP Mini Freedom Lightbars to be mounted on the front of the apparatus below the cab at the discretion of manufacturer for mounting place.

**Zone B, C, D, Lower**

Ten(10) Whelen 60R00RR Red L.E.D. lightheads with 6EFLANGE to be mounted five(5) each driver and passenger side of apparatus. Lightheads to be mounted at the discretion of the manufacturer in compliance with Ithaca Airport. Two(2) Rear of apparatus for a total of twelve(12) lightheads (see Stop, Tail, and Directional Section for other two(2) lightheads.

The emergency lighting described in items 34.1 through 34.6 shall be switched by means of 3-position switches and controlled by a master switch. The switch operation shall be off/master/on.

**AIR HORNS/SIREN/P.A. SPEAKERS:**

Two, (2) Grover air horns, Model AL1601 or equal shall be provided.

The air horns shall be mounted in such a position so that the trumpets will be in front of the vehicle's seated occupants.

The horn shall be mounted for optimum sound projection to the front of the vehicle with a control button or ring located at the steering wheel. Standard electric vehicle horn shall remain live at all times, dash-mounted switch to choose air horn or siren.

One (1) Whelen 295I-IFS1 100W "Hands Free" Electronic Siren.

One (1) Whelen SA122 FMP "Projector ™" 100 Watt Speaker will be recessed under the front bumper in a location to be determined.

**COMPARTMENTS:**

All upper and lower firefighting, storage compartments shall be of dustproof and rainproof construction equipped with Robinson "Rollomatic" or Dover Technologies roller shutter doors with a bar type external latching mechanism.

All upper, storage and access compartments shall include a strap or tether, securely attached to the lower portion of the roll up doors, to aid in closing.

All upper and lower firefighting, storage and access compartments shall be vented, drained and have a matching key lock provided by the roll-up door manufacturer.

A compartment open warning system shall be provided with a cab dash mounted indicator light for all upper and lower firefighting, storage and access compartments.

PVC matting shall be provided in each compartment intended for storage or on any storage tray shall be provided.

The bottom outside of all-upper and lower firefighting, storage and access compartments to have stainless steel edge guard.

The two lower storage compartments on the right and left side of the vehicle shall be equipped with a height adjustable shelf, one shelf per compartment. Each shelf shall have a roll out tray intended for the storage of fire rescue equipment. (Total of 4 shelves and 4 roll out trays).

Four tubular type SCBA cylinder mounting (8 total) compartments; four mounted on each side of the vehicle shall be provided. Each compartment shall be lined with rubber.

All upper compartments will have roll-out tilt-down trays.

**CONNECTIONS, PIPING, COUPLINGS AND VALVES:**

The suction system shall be designed for efficient flow at the designed pumping rates. There shall be a drain at the lowest point with a valve(s) for draining all of the liquid from the pumping system when desired. Plumbing to the drains shall be heavy-duty braid hose for long service life.

Piping shall be stainless steel securely mounted and provided with flexible couplings in areas of stress. Victaulic type couplings shall be provided to facilitate removal of piping.

All valves should be of the quick opening type, which can be serviced in-line and be selected for ease of operation and freedom from leakage (Swing-Out type or equal).

All water system piping shall be tested on the suction side of pump for leakage. All water and AFFF solution discharge piping shall be tested for leakage at 1-1/2 times the system operating pressure.

A means of pressure regulation shall be provided that is adjustable to maintain working pressures from 0 to 300 psi at normal pumping rpm.

All flexible hoses subject to pump pressure excluding drain lines and pressure gauge connections shall be wire braid reinforced hose. For long life, minimum burst pressure shall be 1000 psi

.

An FAA Structural pump panel shall be supplied and shall include the following as a minimum:(Installed similar to attached photos)

An exterior recessed panel shall be located on the left side of the vehicle and be constructed of stainless steel or black vinyl aluminum to prevent marring. This panel shall contain the following:

(1) 6" Pump Suction with 5" MNST Connection w/electric valve
(1) 2.5"Water fill/drain connection with gauge and 1//4 turn bleeder
(1) 1.5"Foam fill/drain connection
(2) 2.5" Discharges with gauges and bleeders w/30 deg. Droops and drains
(1) 2.0" Tank fill off discharge manifold for tank filling.
All controls for structural operation
Master water drain
Water/foam level gauge
Panel light
Manual Foam metering control
Oil pressure/water temp/fuel level gauges
All needed controls to operate and regulate right side discharges from the left side.
An exterior recessed panel shall be located on the right side of the vehicle and be constructed of stainless steel to prevent marring. This panel shall contain the following:

(2) 2.5" Discharges with gauges and bleeders w/30 deg. Droops and drains
5" Discharge with MNST.
Water/foam level gauge
Panel light

**THERMAL RELIEF VALVE:**

The agent system shall be protected against pressure buildup due to heat caused by deadhead pumping.

## CAMERA/MONITOR and FORWARD LOOKING INFRARED (FLIR):

**FORWARD LOOKING INFRARED CAMERA (FLIR):**

**A.) FLIR:**
The night vision subsystem shall be composed of a FLIR (Forward Looking Infrared) camera and display. The system shall not increase the workload stress of the vehicle operator. The FLIR camera must be operational, providing clear thermal images, within 30 seconds of vehicle startup. The system must be capable of allowing the driver to operate the vehicle safely under 0/0 visibility conditions. The camera shall be of the pan and tilt design with all available options and be mounted on a special frame above and behind the roof turret.

**B.) DETECTION RANGE:**
The camera must be able to detect debris, personnel and other wreckage that are within twenty (20) feet of a JET A fuel fire from a range of one-thousand (1000) feet. In addition, the FLIR shall be able to detect personnel under the following conditions. Ambient temperature -20 to 115° F, Humidity (%) 0 - 100 throughout all conditions.

| DISTANCE | SPEED (mph) | WEATHER |
|---|---|---|
| 500 | 50 | LIGHT FOG |
| 400 | 40 | HEAVY FOG |
| 400 | 40 | SMOKE |
| 300 | 35 | RAIN |

The FLIR must sense long wave (8-12 micron) band IR energy. The image shall not be adversely affected by high heat sources, e.g., fires within the scene. Output shall be industry standard such as RS-170.

**C.) MOUNTING:**
The FLIR camera shall be mounted on the forward section of the cab. The camera shall be housed in a weatherproof housing and shall produce an image usable for driving the vehicle. The mounting of the FLIR must not compromise the operation of the roof turret in any manner.

**D.) CONTROLS:**
Controls for the pan/tilt unit shall be mounted inside the driver's compartment, within easy reach of the driver and right seat crew person and shall have a means of displaying the direction of the FLIR line of sight.

**E.) AUTOMATIC OPERATION:**
The FLIR shall have an automatic gain and level controls. No operator intervention shall be required. The FLIR camera automatically activates upon starting the vehicle.

**F.) FIELD OF VIEW:**
The horizontal Field Of View (HFOV) shall be a minimum of 27° . The Vertical Field Of View (VFOV) shall be a minimum of 18°.

**G.) DISPLAY:**
The FLIR camera shall have a 10" monitor. Display screen images shall be visible in daylight conditions.

**COLOR CAMERA**

**A.** A full color, high resolution, shock resistant, weatherproof camera of compact design shall be attached to the nozzle assembly. Camera will move in conjunction with nozzle motion to allow remote controlled positioning. The camera shall be fitted with a motor zoom control. An appropriate lens remote zoom control switch shall be accessible to the operator. A lightweight, compact LCD "flat screen" monitor 10" shall be provided for the operator's position. Monitor shall have a resolution of 719 x 234 with contrast, brightness, color and tint controls plus intensity positions for day, night or automatic settings. Video transmission shall be via cable carried. A camera heater shall be provided, if necessary, to prevent lens fogging. A selectable system shall be provided to allow viewing of two separate camera inputs on one monitor.

**B.** When specified a larger format 10.4" [264mm] flat screen monitor of comparable quality and picture resolution.

**C.** When simultaneous VCR recording capability is required, the VCR unit shall be ½" VHS format (or other specified format) and have the capability to record in 2-4-6 hour modes. A separate audio input shall be provided to simultaneously record radio conversations. Day, date and time encoding shall also be provided.

**HAND LINES:**

The vehicle shall be supplied with two handlines for the discharge of foam/water and one handline for the discharge of Dry Chemical as described below:

A preconnected hand line shall be provided for access from each side of the vehicle, complete with 250 ft. of 1-3/4 inch, with 1-1/2 inch couplings, double jacketed soft hose and Task Force Mid-Matic #HML-VPGI 125 GPM nozzles. These will be in the form of top side cross lay hose beds with a top diamond plate cover built into the first section behind the cab. The nozzles will be secured in cans at mid truck level on each side.

The nozzle shall be a pistol grip non-aspirating 125 GPM @ 100 PSI, which is automatically controlled by a pressure reducing system.
The handlines shall have an auto charge feature that will automatically charge the handline upon complete deployment of the hose from the hose bed.

A Dry Chemical reeled handline mounted with 150 feet of 1.00 booster hose. The flow of the handline shall be a minimum of 5 lbs. per second with the discharge being controlled prior to the nozzle by means at the compartment. The hose reel shall be equipped with a 12 VDC electric rewind motor with manual rewind provisions and rollers for hose deployment. A tension device should be installed to prevent the unreeling of the hose.

An override throttle control shall be provided for the initial charging of each pre-connected hose. (if applicable)

The flow of each Hand line shall be a minimum of 125 GPM with a working pressure of no more than 100 PSI.at 200'. The discharge being controlled prior to the nozzle by means in the cab and at the pre-connect with a safety interlock system that will only allow charging after all of the hose has been deployed.

The cab dash shall have an indicator light to advise when each hose is fully deployed from each compartment.

**UNDER TRUCK NOZZLES:**

Three(3) under truck nozzles shall be mounted under the truck and controlled from cab so as to protect the bottom of the vehicle and the inner sides of the wheels and tires with foam solution discharged in a spray pattern.

**TREATING AND PAINTING:**

All parts of the vehicle shall be cleaned; primed, puttied, water sanded, and painted the specified color with a lead and chromate free polyurethane paint.

After the vehicle components are completely painted, except for bright trim parts, the entire vehicle shall be assembled with proper corrosion barriers between all areas of differential metals that would promote corrosion.

The finished paint shall be free from "orange peel" (pebbly finish), runs, and other imperfections. The final finished shall be a clearcoat finish.

The cab shall match color Sikkens lime/yellow FLNA 6051.

Two vinyl reflective red stripes w/1/4" black outline will run the length of vehicle in a manner and location to be determined.

One 8" vinyl white stripe will run the length of the vehicle in a manner and location to be determined.

8" vinyl black lettering, in a font agreed upon in advance, depicting "ITHACA TOMPKINS REGIONAL AIRPORT" will be on both sides of vehicle.

A goldleaf vinyl Maltese cross will be on each cab door. Artwork will be provided and will be sized to fit door.

**PRE-CONSTRUCTION CONFERENCE:**

The successful supplier is required, prior to the start of manufacture, to hold a Pre-construction conference at an agreed upon time, day, at the Ithaca Tompkins Regional Airport, with the Airport Fire Rescue Division to finalize all details. At this conference the contractor shall furnish all blueprints, drawings, specifications and details of the unit to be manufactured and delivered. This conference will take place within 30 days of award. The scope of this meeting will be final locations of shelving and Blue Print layout, etc.

**ON-SITE VISITS:**

During the period of manufacture and production, the Airport shall make a maximum of two- (2) on-site visits to the plant for two- (2) personnel. These visits shall be for the purpose of observing and reviewing the manufacturing progress. The time and duration of each visit shall be agreed upon between the Fire Chief and the Contractor. It is anticipated that each on-site visit shall take two- (2) full days. Ithaca Tompkins Regional Airport shall incur and pay all cost for such visits including ground/air transportation, lodging and meals for these employees; such cost shall Not be included in the bid price.

***Note: This inspection will be thorough and inclusive. A line by line comparison of the specification with the vehicle will be made. All phases of performance testing will be performed. The bidder will be responsible for providing adequate facilities for these tests as well as any hardware or hose needed for the tests.***

**WARRANTIES:**

The Manufacturer's 60-month (minimum) Warranty on the vehicle which covers defective parts and/or components, improper design or choice of materials, parts and/or components, improper design or engineering and poor or improper workmanship or quality control techniques. Warranty shall cover the complete apparatus and shall include any and all cost for labor and parts or material that are required to correct any and all deficiencies.

It is not the intent of Ithaca Tompkins Regional Airport that the warranty apply to parts or components that could normally wear out within a one year period, such as, light bulbs, filters, brake linings, windshield wiper blades, etc. If a component manufacturer provides an independent warranty, which exceeds the 60-Month period, the component manufacturers warranty shall be effective.

If a component manufacturer does not provide a warranty equal in time to that specified, or which does not fully cover all cost, the contractor is solely responsible for bearing any additional cost or, labor for removal and installation. The manufacture is responsible for contractual warranty repair or replacement service, and the reimbursement for salaries of all Ithaca Tompkins Regional Airport employees that may be engaged in performing warranty work at the request of the Contractor.

Within forty-eight (48) hours after receipt of a verbal or written notification by Ithaca Tompkins Regional Airport of warranty service is required. The contractor shall respond verbally, and immediately follow up by letter to Ithaca Tompkins Regional Airport with a statement of intent to show where and when the warranty service shall be accomplished.

In the event that there is no response or if the response exceeds forty-eight (48) hours, or if the response that is received is on time but is not acceptable to the Chief of the Ithaca Tompkins Regional Airport Fire Rescue Division, the Chief will provide for the required warranty service, and the total costs of all labor, parts, components, materials, and freight shall be reimbursed to Ithaca Tompkins Regional Airport by the Contractor within thirty (30) calendar days after the bill has been mailed to the Contractor.

All warranties shall begin upon acceptance of the unit by Ithaca Tompkins Regional Airport Fire Rescue Division.

The Contractor shall furnish to the Ithaca Tompkins Regional Airport all information and material necessary for mandatory revisions modifications as determined by the manufacturer.

**Shoreline Connections:**

The air and electrical connections will not be of Kussamul type and will be discussed at pre-build conference.

**Auxiliary Equipment**

The following auxiliary equipment shall be supplied with the vehicle (and mounted in a location agreed upon with the purchaser):

| | |
|---|---|
| 1 | Set of chocks, rubber |
| 2 | Rope line,1/2" dia., 50 foot length |
| 2 | 8' fiberglass pike poles |
| 2 | Hand crash axe, rescue with sheath |
| 1 | Blanket, (12'X12') fire resistant furnished with a storage pouch |
| 1 | Cutter, bolt 24 inch |
| 1 | Crowbar, 36 inch |
| 2 | Rechargeable flashlight equipped with a spot beam shall be mounted in the cab, Streamlight Light Box, model SL40 or equal. |
| 1 | Hacksaw, heavy duty with spare blades |

| | |
|---|---|
| 1 | Medical kit, EMT type (Moore Medical #51961 or equal) |
| 1 | Pliers, side-cutting 9 inch (Snap-On or approved equal) |
| 1 | Pliers, slip joint 10 inch (Snap-On or approved equal) |
| 1 | Saw, Partner K1200 kit powered rescue complete with two 12 inch spare metal cutting blades, carrying case, goggles, fuel can |
| 1 | Screwdriver set, assorted sizes and blade types (Snap-On or approved equal) |
| 1 | Shears, sheet metal straight cut (Snap-On or approved equal) |
| 1 | Wrench, adjustable (Snap-On or approved equal) |
| 1 | Toolbox or canvas tool roll to hold all hand tools. |
| 2 | 30"Halligan tools (Iowa American, model IAHT_30SS or approved equal); one piece construction. |
| 1 | Axe, rescue, large six pound serrated large non-wedge type head and fiberglass handle mounted on the vehicle. |
| 10 | Scott Air-Pak X3 SCBA with integrated PASS, fire ground communications enhancement with the AV-3000 HT facepiece, EPIC 3 Communications, "external" HUD, optimally positioned "buddy" lights, and CGA cylinder connection. 4500 psi 30-min carbon air cylinders. |
| 10 | Spare Scott 4500psi 30-min. carbon air cylinders with valve assemblies. |
| 1 | Hammer, 4 pound (Snap-On or approved equal) |
| 1 | Ladder, Little Giant 26 ft., mounted as approved |
| 1 | Ladder, 20' Duo Safety (two section) mounted as approved. |
| 1 | Air Hammer Rescue Kit (AJAX #911 RKM or equal) |
| 1 | FAAST Penetrating Nozzle w/standard carrying case, KK 1.50" ball valve (F140F), Double female 1.50" x 1.50"NST |
| 4 | 2 1/2" spanner wrenches, 2 mounted on each side (Akron style 10 or equal). |
| 2 | Small STORTZ wrenches |
| 2 | Large STORTZ wrenches |
| 8 | 50' lengths of 12/3 HD extension cord, w/ twist-lock ends. |

| | |
|---|---|
| 2 | 20 lb Water mist fire extinguishers |
| 2 | 20 lb Purple K fire extinguishers |
| 1 | 16” Chain saw, gas (Cutters Edge model #CE-2071-RS-16 w/D-6 kit or equal) |
| 1 | Positive Pressure Ventilation (PPV) Fan (Super Vac Model #720G4H w/Honda motor option #GX-160) |
| 2 | Hand held Thermal Imaging Camera (Bullard Eclipse LD) |
| 3 | 100’ Core style Hydraulic reels (Holmatro DHR100C or equal) |
| 1 | Rescue Spreader (Holmatro 4240 or equal) |
| 1 | Rescue Cutters (Holmatro 4050 NCT or equal) |
| 1 | Mini Cutter (Holmatro CU4007 or equal) |
| 1 | Telescoping Rescue Ram (Holmatro 4340 or equal) |
| 1 | Telescoping Rescue Ram (Holmatro 4350 or equal) |
| 1 | Battery Powered Mobile Pump with spare battery and charging stations for both. (Holmatro SPU 16 BC or equal) |
| 1 | 50’ Core style Hydraulic hose (Holmatro or equal) |

**Additional adapters:**

| | |
|---|---|
| 1 | 5” NSFHT to 5” strortz |
| 1 | 5"-4" Stortz |
| 1 | 2.50" gated "Y", NSFHT |
| 1 | 2.50" to 1.50"gated "Y" NSFHT |
| 3 | 2.50" NSFHT to 1.50" NSFHT |
| 3 | 1.50" NSFHT to 1.50" NSFHT |
| 1 | 5" stortz to gated siames 2.50" NSFHT |
| 2 | 10', 5" NSFHT flexible suction line |
| 1 | 5" NSFHT Low Level Strainers |
| 1 | 5” NSFHT barrel strainer |
| 1 | 5” Portable 5 way manifold w/4-2.5” NHM (Harrington # H400-50-50-25NH or equal) |
| 1 | 5” NSFHT Hydrant adapter |
| 1 | 50’-5” supply line |
| 10 | 50’-3” double jacketed hose |

A. 2 factory service manuals
B. 2 Parts manual, to include part numbers for ALL vehicle components.
C. 1 Complete electrical schematic drawing
D. 1 Lubrication chart
E. 2 Operating manual
F. 2 Complete sets of filters with locations of each filter.

# BID FORM

Ithaca Tompkins Regional Airport
Aircraft Rescue and Fire Fighting (ARFF) Vehicle

*The unit cost indicated below assumes all costs associated with procurement of one (1) Aircraft Rescue and Fire Fighting (ARFF) Vehicle as described within the preceding specifications including, but not limited to:*

1. *Delivery of the vehicle within the specified timeframe indicated below;*
2. *Training of Airport personnel as required;*

---

| Year | Make | Model | Bid Price | Delivery (in calendar days after approval to build is given by the Airport) |
|---|---|---|---|---|
| | | | | |

**Bid Price Written in Words:**_____

---

**Deviations**

Please describe below any/all deviations to the specifications. Attach additional pages if needed.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

---

**Company Information**

Company Name:_____

Contact Information:_____

Name, cell phone # (if applicable), email address

## ANTI-DISCRIMINATION CLAUSE

During the performance of this contract, (the contractor) hereby agrees as follows:

(a) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color or national origin, and will take affirmative action to insure that they are afforded equal employment opportunities without discrimination because of race, color, creed, ethnicity, Vietnam-era veteran status, disabled veteran, marital status, disability, national origin, or status as an ex-offender. Such action shall be taken with reference, but not be limited, to: recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on-the-job training.

(b) The contractor will send to each labor union or representative of workers with which he has or is bound by a collective bargaining or other agreement or understanding, a notice, to be provided by the State Commissioner for Human Rights, advising such labor union or representative of the contractor's agreement under clauses (a) through (f) hereinafter called "non-discrimination clauses". If the contractor was directed to do so by the contracting agency as part of the bid or negotiation of this contract, the contractor shall request such labor union or representative to furnish him with as written statement that such labor union or representative either will affirmatively cooperate, within the limits of its legal and contractual authority, in the implementation of the policy and provisions of these non-discrimination clauses or that it consents and agrees that recruitment, employment and the terms and conditions of employment under this contract shall be in accordance with the purposes and provisions of these non-discrimination clauses. If such labor union or representative fails or refuses to comply with such a request that it furnish such a statement, the contractor shall promptly notify the State Commission for Human Rights of such failure or refusal.

(c) The contractor will post and keep posted in conspicuous places, available to employees and applicants for employment, notices to be provided by the State Commission for Human Rights setting forth the substance of the provisions of clauses (a) and (b) and such provisions of the State's and local Tompkins County Laws against discrimination as the State Commission for Human Rights shall determine.

(d) The contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the contractor, that all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color or national origin.

(e) The contractor will comply with the provisions of Sections 291-299 of the Executive Law and the Civil Rights Law, will furnish all information and reports deemed necessary by the State Commission for Human Rights under these non-discrimination clauses and such sections of the Executive Law, and will permit access to his books, records and accounts by the State Commission for Human Rights, the Attorney General and the Industrial Commissioner for purposes of investigation to ascertain compliance with these non-discrimination clauses and such sections of the Executive Law and Civil Rights Law.

(f) This contract may be forthwith cancelled, terminated or suspended, in whole or in part, by the contracting agency upon the basis of a finding made by the State Commission for Human Rights that the Contractor may be declared ineligible for future contracts made by or on behalf of the State or a public authority or agency of the State, until he satisfies the State Commission for Human Rights that he has established and is carrying out a program in conformity with the provisions of these non-discrimination clauses. Such finding shall be made by the State Commission for Human Rights after conciliation efforts by the Commission have failed to achieve compliance with these non-discrimination clauses and after a verified complaint has been filed with the Commission, notice thereof has been given to the Contractor and opportunity has been afforded him to be heard publicly before three members of the Commission. Such sanctions may be imposed and remedies invoked independently of or in addition to sanctions and remedies otherwise provided by law. The Contractor will include the provisions of clauses (a) through (f) in every subcontract or purchase order in such a manner that such provisions be performed within the State of New York. The Contractor will take such action in enforcing such provisions of such subcontract or purchase order as the contracting agency may direct, including sanctions or remedies for non-compliance. If the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor shall promptly so notify the Attorney General, requesting him to intervene and protect the interests of the State of New York.

GENERAL CONDITIONS ACCEPTED BY:

Firm: _____

By: _____

Date: _____

Title: _____

**COUNTY OF TOMPKINS**
**GENERAL CONDITIONS**

## AFFIDAVIT OF NON-COLLUSION

NAME OF RESPONDER: _____ PHONE NO.: _____ FAX NO.: _____

BUSINESS ADDRESS: _____ EMAIL: _____

I hereby attest that I am the person responsible within my firm for the final decision as to the price(s) and amount of the proposal, or If not, that I have written authorization, enclosed herewith, from that person to make the statements set out below on his/her behalf and on behalf of my company.

I further attest that:

1. The prices in this bid/proposal have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition with any other contractor, responder or potential bidder; and
2. Neither the price(s), nor the amount of this bid/proposal, have been disclosed to any other firm or person who is a responder or potential responder on this project, and will not be so disclosed prior to bid/proposal opening; and
3. No attempt has been made or will be made to solicit, cause or induce any company or person to refrain from responding to this RFB/RFP, or to submit a bid/proposal higher than the proposal of this company, or any intentionally high or non-competitive bid/proposal or other complementary proposal; and
4. The bid/proposal of my company is made in good faith and not pursuant to any agreement or discussion with, or inducement from any firm or person to submit a complementary proposal; and
5. My company has not offered or entered into a subcontract or agreement regarding the purchase of materials or services from any other company or person, offerer, promised or paid cash of anything of any value to any company or person, whether in connection with this or any other project, in consideration for an agreement or promise by a company or person to refrain from responding to this RFB/RFP or to submit a complementary bid/proposal on this project; and
6. My company has not accepted or been promised any subcontract or agreement regarding the sale of materials or services to any company or person, and has not been promised or paid cash or anything of value by and company or person, whether in connection with this or any project, in consideration for my company's submittting a complementary bid/proposal or agreeing to do so on this project; and
7. I have made a diligent inquiry of all members, officers, employees, and agents of my company with responsibilities relating to the preparation, approval or submission of my company's proposal on this project and have been advised by each of them that he or she has not participated in any communication, consultation, discussion, agreement, collusion act or other conduct inconsistent with any statements and representations made in this affidavit.
8. **By submission of this proposal I certify that I have read, am familiar with, and will comply with any and all segments of these specifications.**

The person signing this proposal, under the penalties of perjury, affirms the truth thereof.

Signature & Company Position:_____

Print Name & Company Position:_____

Company Name:_____

Date Signed_____ Federal I.D. Number_____

TYPE 1

## TOMPKINS COUNTY INSURANCE AND INDEMNIFICATION

The Successful Bidder Shall Maintain and Agree to the Following:

(Vendor) hereinafter referred to as Contractor, shall indemnify, hold harmless and defend Tompkins County and its officers, employees, agents and elected officials from and against any and all claims and actions brought against Tompkins County and its officers, employees, agents and elected officials for injury or death to any person or persons or damage to property arising out of the performance of this contract by the Contractor, its employees, subcontractors or agents except all actions and claims arising out of the negligence of Tompkins County. The Contractor shall maintain the following minimum limits of insurance or as required by law, whichever is greater.

A.) **Workers' Compensation and New York Disability** - Statutory Coverage Employer's Liability - Unlimited.

B.) **Commercial General Liability** including, contractual, independent contractors, products/completed operations - Occurrence Form required.

| | | |
|---|---|---|
| * | Each Occurrence | $1,000,000 |
| * | General Aggregate | 2,000,000 |
| * | Products/Completed Operations Aggregate | 2,000,000 |
| * | Personal and Advertising Injury | 1,000,000 |
| * | Fire Damage Legal | 50,000 |
| * | Medical Expense | 5,000 |

- **General Aggregate** shall apply separately to the project prescribed in the contract

* Tompkins County and its officers, employees, agents and elected officials are to be included as **Additional Insureds**

C.) **Business Auto Coverage** Liability for Owned, Hired and Non-Owned Autos $1,000,000 CSL or 500,000 Per Person BI 1,000,000 Per Accident BI 250,000 PD Split Limits

* Tompkins County and its officers, employees, agents and elected officials are to be included as **Additional Insureds**

All insurance shall be written with insurance carriers licensed by the State of New York Insurance Department and have a Best's rating of A XI or better. Proof of insurance shall be provided on the Tompkins County Certificate of Insurance (copy attached) including the Contract Number. The accord Certificate of Insurance or insurance company certificate may be used for proof of Workers' Compensation and Disability. All Certificates shall contain a sixty (60) day notice of cancellation, non-renewal or material change to Tompkins County. All Certificates must be signed by a licensed agent or authorized representative of the insurance company. Broker signature is not acceptable. Certificates of Insurance shall be submitted with the RFP/bid.

# TOMPKINS COUNTY
# CERTIFICATE OF INSURANCE

BIDS CANNOT BE ACCEPTED NOR CAN WORK COMMENCE UNTIL THIS CERTIFICATE IS RECEIVED AND ACCEPTED BY COUNTY ADMINISTRATION

| | | |
|---|---|---|
| INSURED<br>NAME<br>ADDRESS<br>CITY,ST ZIP | *INSURANCE CARRIER:*<br>A | A.M. BEST RATING: |
| | B | |
| PRODUCER<br>NAME<br>ADDRESS<br>CITY, ST ZIP<br>PHONE: | C | |
| | D | |

This certifies that the policies listed below have been issued and are in force at this time.

| CO LTR | TYPE OF INSURANCE | POLICY NUMBER | EFFECTIVE DATE | EXPIRATION DATE | LIMITS (IN $1,000) |
|---|---|---|---|---|---|
| | **GENERAL LIABILITY**<br>☐ OCCURRENCE FORM<br>☐ OTHER | (Certified copy of policy must be submitted if "other) | | | EACH OCCURRENCE $<br>GENERAL AGGREGATE $<br>PRODUCTS-COMP/OP AGG. $<br>PERSONAL & ADV INJURY $<br>FIRE DAMAGE (ANY ONE FIRE) $ |
| | **AUTOMOBILE LIABILITY**<br>☐ ANY AUTO<br>☐ OWNED AUTOS<br>☐ HIRED AUTOS<br>☐ NON-HIRED AUTOS | | | | COMBINED SINGLE LIMIT $<br>BODILY INJURY (per person) $<br>BODILY INJURY (per accident) $<br>PROPERTY DAMAGE $ |
| | **EXCESS LIABILITY**<br>☐ UMBRELLA FORM<br>☐ OTHER THAN UMBRELLA | | | | EACH OCCURRENCE $ |
| | **WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY** | | | | COVERAGE A STATUTORY<br>COVERAGE B "<br>EACH ACCIDENT $<br>DISEASE-POLICY LIMIT $ |
| | **NYS DISABILITY** | | | | STATUTORY |
| | **PROFESSIONAL LIABILITY OR ERRORS/OMISSIONS** | | | | $ |
| | **OWNERS CONTRACTORS PROTECTIVE LIABILITY** | | | | |
| | **OTHER** | | | | |

Insurance Carriers providing liability coverages acknowledge that the above referenced contract constitutes an "Insured Contract" as defined in their policy. As required by said contract, the County of Tompkins and its officers, employees, agents and elected officials are included as Additional Insureds under each respective policy. Insurance Carriers endevour that no policy will be non-renewed, canceled, or materially changed without thirty (30) days advance notice to County Administration.

Certificate Holder:

**TOMPKINS COUNTY ADMINISTRATION**
**125 EAST COURT STREET**
**ITHACA, NY 14850**

PHONE (607-274-5548 FAX: (607) 274-5558
JKippola@Tompkins-Co.Org

Authorized Representative

Signature

Name

Title Date

**Tompkins County**
**Vendor Responsibility Form**

The Office of the State Comptroller requires that governmental agencies award contracts only to vendors that have been certified as "responsible." Vendor responsibility means that a vendor has the integrity to justify the award of public dollars and the capacity to fully perform the requirements of the contract. It is the contracting agency's responsibility, under Section 163 (9) of the State Finance Law (SFL), to evaluate and make a determination of the responsibility of a prospective contractor. A responsibility determination, wherein the contracting agency determines that it has reasonable assurances that a vendor is responsible, is an important part of the procurement process, promoting fairness in contracting and protecting a contracting agency and the County against failed contracts.

The following factors are to be considered in making a responsibility determination:

1. Legal Authority to do business in New York State
2. Integrity
3. Capacity – both organizational and financial
4. Previous performance

Please complete the following questions. This form **must** be returned with your bid submission in order for your bid to be ruled responsive.

Within the past five (5) years has your firm, any affiliate, any predecessor or company or entity, owner, director, officer, partner or proprietor been the subject of:

**ANSWER ALL QUESTIONS**

A. An indictment, judgment, conviction, or a grant of immunity, including pending actions, for any business related conduct constituting a crime under governmental law? YES _____ NO _____

B. A government suspension or debarment, rejection of any bid or disapproval of any proposed sub-contract, including pending actions, for lack of responsibility, denial or revocation of prequalification or a voluntary exclusion agreement? YES _____ NO _____

C. Any governmental determination of a violation of any public works law or regulation, or labor law or regulation, or any OSHA violation deemed "serious or willful?" YES _____ NO _____

D. A consent order with NYS Department of Environmental Conservation, or a governmental enforcement determination involving a construction-related violation of federal, state, or local environmental laws? YES _____ NO _____

E. A finding of non-responsibility by a governmental agency or Authority for any reason. YES _____ NO _____

If yes to any of the above, please provide details regarding the finding.

ENTITY MAKING FINDING: _____

YEAR OF FINDING: _____

BASIS OF FINDING: _____

_____

_____

(Attach additional sheets if necessary)

Offerer Certification:

*I certify that all information provided to Tompkins County with respect to State Finance Law §139-k is complete, true and accurate.*

Name: _____ Title: _____

Company Name: _____

Company Address: _____

Signature: _____

Form **W-9**
(Rev. October 2007)
Department of the Treasury
Internal Revenue Service

# Request for Taxpayer Identification Number and Certification

**Give form to the requester. Do not send to the IRS.**

**Print or type** See **Specific Instructions** on page 2.

Name (as shown on your income tax return)

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶
☐ Other (see instructions) ▶

☐ Exempt payee

Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

City, state, and ZIP code

List account number(s) here (optional)

## Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

**Note.** If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

**Social security number**

**or**

**Employer identification number**

## Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

**Sign Here** **Signature of U.S. person ▶** **Date ▶**

## General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

## Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

**Note.** If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

***Example.*** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

**Payments you receive will be subject to backup withholding if:**

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

## Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of $50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a $500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

# Specific Instructions

## Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

**Sole proprietor.** Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name" line.

**Limited liability company (LLC).** Check the "Limited liability company" box only and enter the appropriate code for the tax classification ("D" for disregarded entity, "C" for corporation, "P" for partnership) in the space provided.

For a single-member LLC (including a foreign LLC with a domestic owner) that is disregarded as an entity separate from its owner under Regulations section 301.7701-3, enter the owner's name on the "Name" line. Enter the LLC's name on the "Business name" line.

For an LLC classified as a partnership or a corporation, enter the LLC's name on the "Name" line and any business, trade, or DBA name on the "Business name" line.

**Other entities.** Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name" line.

**Note.** You are requested to check the appropriate box for your status (individual/sole proprietor, corporation, etc.).

## Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the business name, sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

**Note.** If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),

2. The United States or any of its agencies or instrumentalities,

3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,

4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or

5. An international organization or any of its agencies or instrumentalities.

Other payees that may be exempt from backup withholding include:

6. A corporation,

7. A foreign central bank of issue,

8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,

9. A futures commission merchant registered with the Commodity Futures Trading Commission,

10. A real estate investment trust,

11. An entity registered at all times during the tax year under the Investment Company Act of 1940,

12. A common trust fund operated by a bank under section 584(a),

13. A financial institution,

14. A middleman known in the investment community as a nominee or custodian, or

15. A trust exempt from tax under section 664 or described in section 4947.

The chart below shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

| IF the payment is for . . . | THEN the payment is exempt for . . . |
|---|---|
| Interest and dividend payments | All exempt payees except for 9 |
| Broker transactions | Exempt payees 1 through 13. Also, a person registered under the Investment Advisers Act of 1940 who regularly acts as a broker |
| Barter exchange transactions and patronage dividends | Exempt payees 1 through 5 |
| Payments over $600 required to be reported and direct sales over $5,000[1] | Generally, exempt payees 1 through 7[2] |

[1] See Form 1099-MISC, Miscellaneous Income, and its instructions.

[2] However, the following payments made to a corporation (including gross proceeds paid to an attorney under section 6045(f), even if the attorney is a corporation) and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, and payments for services paid by a federal executive agency.

## Part I. Taxpayer Identification Number (TIN)

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited liability company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at *www.ssa.gov*. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting *www.irs.gov* or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** *A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.*

## Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, and 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). Exempt payees, see *Exempt Payee* on page 2.

**Signature requirements.** Complete the certification as indicated in 1 through 5 below.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

## What Name and Number To Give the Requester

| For this type of account: | Give name and SSN of: |
|---|---|
| 1. Individual | The individual |
| 2. Two or more individuals (joint account) | The actual owner of the account or, if combined funds, the first individual on the account [1] |
| 3. Custodian account of a minor (Uniform Gift to Minors Act) | The minor [2] |
| 4. a. The usual revocable savings trust (grantor is also trustee) | The grantor-trustee [1] |
| b. So-called trust account that is not a legal or valid trust under state law | The actual owner [1] |
| 5. Sole proprietorship or disregarded entity owned by an individual | The owner [3] |
| **For this type of account:** | **Give name and EIN of:** |
| 6. Disregarded entity not owned by an individual | The owner |
| 7. A valid trust, estate, or pension trust | Legal entity [4] |
| 8. Corporate or LLC electing corporate status on Form 8832 | The corporation |
| 9. Association, club, religious, charitable, educational, or other tax-exempt organization | The organization |
| 10. Partnership or multi-member LLC | The partnership |
| 11. A broker or registered nominee | The broker or nominee |
| 12. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments | The public entity |

[1] List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

[2] Circle the minor's name and furnish the minor's SSN.

[3] You must show your individual name and you may also enter your business or "DBA" name on the second name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

[4] List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

## Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

Call the IRS at 1-800-829-1040 if you think your identity has been used inappropriately for tax purposes.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.** Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov.* You may also report misuse of the IRS name, logo, or other IRS personal property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: *spam@uce.gov* or contact them at *www.consumer.gov/idtheft* or 1-877-IDTHEFT(438-4338).

Visit the IRS website at *www.irs.gov* to learn more about identity theft and how to reduce your risk.

## Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons who must file information returns with the IRS to report interest, dividends, and certain other income paid to you, mortgage interest you paid, the acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA, or Archer MSA or HSA. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. The IRS may also provide this information to the Department of Justice for civil and criminal litigation, and to cities, states, the District of Columbia, and U.S. possessions to carry out their tax laws. We may also disclose this information to other countries under a tax treaty, to federal and state agencies to enforce federal nontax criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism.

You must provide your TIN whether or not you are required to file a tax return. Payers must generally withhold 28% of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to a payer. Certain penalties may also apply.

**BID/PROPOSAL SIGN-OFF SHEET**

**BID/PROPOSAL TITLE:**

Please check off and sign for items below and submit this required sheet with your bid/proposal response; the bid/proposal may be rejected if the required documents are not included with the response.

| | DONE | INITIALS |
|---|---|---|
| 1. Bid/Proposal completed | | |
| 2. Non-Collusive certificate completed | | |
| 3. Anti-Discrimination clause completed | | |
| 4. Proof of insurance coverage in amounts required by specification signed by insurance agent enclosed | | |
| 5. Addenda (if issued) received | | |
| List Addendum # and dates | | |
| | | |
| 6. Vendor Responsibility Form completed | | |
| 7. Agree to all Terms & Conditions as provided within the specifications | | |
| 8. W-9 Taxpayer Identification and Certification | | |
| 9. Bid Sign-Off Form completed | | |

By signing below the respondent is certifying that:

1. All information provided herein is true and correct to the best of their knowledge.
2. The respondent has read and understands the specifications in their entirety and that the response is made in accordance therewith, and;
3. The respondent possesses the capabilities, resources, and personnel necessary to provide efficient and successful service to the County, and;
4. The respondent will be held responsible for any and all discrepancies, errors, etc. in the discounts or rebates which are discovered during the contract term or up to and including three (3) fiscal years following the County's annual audit.

_____
Name/Title of Authorized Person Submitting Bid

_____
Firm or Corporation Making Bid

_____
Address

_____ _____
Telephone Fax

_____
(Remit to address (if different than above))

_____
Signature of Authorized Person Submitting Bid