SECTION 2

SPECIAL TERMS AND CONDITIONS

2.1 PURPOSE
The purpose of this solicitation is to procure a Flashover Module which will allow the Miami-Dade Fire Department to provide certifiable Class A (combustible materials) fire training to recruits and officers. Florida Administrative Code 69A-37.405(2) states to observe basic fire behavior, each trainee shall be exposed to very basic props or scenarios and progressively build to more complex scenarios that approximate realistic conditions. A Flashover Module will allow County operations personnel to create live controlled Class A fires at the training center; creating Class A fires will give recruits and firefighters experience with real fire, heat and smoke conditions; as well as provide them with the knowledge and confidence needed to perform their job efficiently.

2.2 TERM
This contract shall commence on the first calendar day of the month succeeding approval of award by the Board of County Commissioners or designee, unless otherwise stipulated in the Purchase Order issued by the Procurement Management Division of the Internal Services Department and shall remain in effect until such time as the goods are delivered and/or services are completed and accepted by the County’s authorized representative.

2.3 METHOD OF AWARD
This contract shall be awarded to the lowest responsive and responsible bidder. Bidder(s) shall submit specifications and their lowest price for the design, fabrication and installation of a Flashover Module which meets the requirements of this solicitation.

2.4 METHOD OF PAYMENT
The awarded bidder shall submit a proper invoice along with all associated back-up documentation upon delivery and installation of the Flashover Module. A proper invoice is an invoice which contains the Company name and/or DBA (doing business as name), correct remittance address, invoice date, lists a unique invoice number, the solicitation number, a detailed description of the goods and/or services being provided, a detailed breakdown of the costs associated with the goods and/or services provided for the period, the invoice/service period, total amount of the invoice, the name of the County department for whom the services were rendered and/or goods delivered/provided and any supplemental information/documents required by the County before payment can be made. The awarded bidder shall be paid in accordance with Section 218.74 F.S. and Section 2-8.1.4 of the Miami-Dade County Code, after the submittal of a proper invoice. Failure to submit a proper invoice may result in a delayed payment. All invoices shall be submitted utilizing one of the methods below:

Via Email:
invsubp@miamidade.gov
OR

Via Postal Mail:
Miami-Dade County, Finance Department
C/O: Fire Rescue
Attn: Shared Services Payable Unit
111 NW 1st Street, 26th Floor
Miami, FL 33128
Please submit invoices using one of the methods above as submitting an invoice utilizing both methods will result in a duplicate invoice and a delayed payment. The County may at any time designate a different address and/or contact person by giving written notice to the other party.
SECTION 3

SCOPE OF WORK/TECHNICAL SPECIFICATIONS

3.1 BACKGROUND
Under Florida Law, Miami-Dade County Fire Rescue Department must provide firefighter trainees experience with real fire, heat and smoke conditions which will give them the knowledge and confidence needed to perform their job effectively. Procuring a burn module system will allow firefighter trainees to observe conditions from a safe distance as well as understand fire behavior and perform simulations to control ventilation and practice water application.

3.2 SCOPE OF WORK
The County is seeking the services of a bidder who can provide a Flashover Module that is capable of delivering a flashover/rollover for observation, burn rooms for fire extinguishment, a training curriculum and at least one year of warranty from the manufacturer of the module. The awarded vendor shall be responsible for delivering, off-loading, setting up and/or installing the Flashover Module on the concrete pad provided by the County. The awarded bidder shall also be responsible for initial operation of the Flashover Module and training MDFR staff on utilizing the module. The County shall take ownership of the Flashover Module after the module has been installed, accepted by the County’s representative and MDFR staff have been properly trained on how to utilize the module.

3.3 FLASHOVER MODULE SPECIFICATIONS
The awarded bidder shall provide a Flashover Module made up of two (2) components; an upper component called the Burn Chamber and a lower component called the Observation Chamber. Both components shall be fabricated from cargo shipping containers no older than five (5) years old. Each component shall also contain a temperature monitoring system. The entire Flashover Module shall not be greater than the 40 feet long by 14 feet wide concrete pad in which it will be secured on. The Flashover Module shall also not be greater than 20 feet tall. The Flashover Module shall be equipped with insulated corrugated steel, double-layered walls, ceilings and doors, emergency doors, a ventilated hatch, high temperature shielding, a safe location for firefighters and/or trainees to observe and an area to extinguish a Class A fire.

3.3.1 BURN CHAMBER
The Burn Chamber shall be fabricated utilizing a cargo shipping container, less than five years old and shall be able to burn Class A (combustible materials) fires. The Burn Chamber shall be attached to a platform and the Observation Chamber with a continuous, seamless weld. The Burn Chamber shall sit a minimum of 3 feet above the bottom of the Observation Chamber and the dimensions of the Burn Chamber shall be smaller than the dimensions of the Observation Chamber. The exterior of the burn module shall be made with a minimum of 14-gauge corrugated steel and shall be painted with high temperature paint. The interior of the Burn Chamber shall be insulated with high performance insulation and/or heat resistant tiles designed for continuous burning of temperatures between 1,400°F – 2,500°F layered on the walls, ceiling and doors. The interior of the chamber shall also have 7-gauge steel lining covering the ceiling, walls and doors and be a continuously welded piece. The Burn Chamber shall have 5/8 inch suspension chains installed on the three walls and ceiling. The Burn Chamber shall have a burn crib designed to maximize airflow to induce rollover and a quick vent hatch placed in the ceiling over the burn crib to be operable by an exterior mounted winch system. The Burn Chamber shall have a floor damper installed to allow airflow to the seat of the fire. The floor damper shall be controlled by a lever mounted in the Observation Chamber. The floor of the Burn Chamber shall be stripped of all combustible material and lined with fire brick (concrete paving blocks). Drainage weep holes shall be installed under fire brick. The Burn Chamber shall have a quick vent hatch placed in the ceiling over the burn crib which must be operable by an exterior mounted winch system. The Burn Chamber shall have outward opening (outward towards the platform) double doors to allow loading and cleaning of the burn.
chamber. The opposite end must be open to allow firefighters in the Observation Chamber to observe fire behavior. The Burn Chamber shall contain a temperature monitoring system. The dimensions of the actual Burn Chamber shall be no less than 8 feet long, 8 feet wide and 8 feet tall.

3.3.2 OBSERVATION CHAMBER
The Observation Chamber shall be fabricated from a cargo container, less than five years old and be attached to the Burn Chamber with a continuous, seamless weld. The dimensions of the Observation Chamber shall be greater than the dimensions of the Burn Chamber. The exterior of the Observation Chamber must be 14-gauge corrugated steel, painted with a high temperature resistant paint. The interior walls of the Observation Chamber shall be insulated with high performance insulation or tiles layered on the walls, ceilings and doors. The chamber shall also have 7-gauge steel lining covering the ceiling, walls and doors and be a continuously welded piece. The insulation or tiles must encompass the upper 5 feet section of the chamber and extend a minimum of 10 feet from the Burn Chamber into the Observation Chamber. The Observation Chamber shall contain a ventilation hatch system installed in the ceiling towards the Burn Chamber. The ventilation system shall be operable by an interior and exterior lever system. The Observation Chamber shall have a pivoting heat baffle mounted on the ceiling. The Observation Chamber shall contain metal flooring, stripped of all combustible material and covered with fire brick (concrete paving blocks). Drainage weep holes shall be installed under fire brick. The Observation Chamber shall contain a minimum of three (3) doors: one (1) standard outward opening cargo shipping container double door at the rear of the Observation Chamber (away from the Burn Chamber) and one (1) outward opening single door on each the side of the Observation Chamber. Each side door shall be a minimum of 3 feet by 7 feet and be fabricated to close automatically. If the Observation Chamber is elevated above the ground, the Observation Chamber shall contain steps which extend to the ground level. The Observation Chamber shall contain bench seating, capable of seating and withstanding the weight of at least ten (10) firefighters wearing full personal protective equipment. The bench seating shall also be fabricated of material which can be exposed to prolonged heat and repetitive evolutions. The Observation Chamber shall contain a cutout and/or cutouts capable of accommodating at least two (2) hose lines ranging from 1 ½ - 1 ¾ inches thick. The Observation Chamber shall contain a temperature monitoring system.

3.3.3 PLATFORM
A loading platform shall be connected to the Burn Chamber. The platform shall be a minimum of 8’ longs and 8 ½’ wide. The platform shall be able to accommodate loading and cleaning of the Burn Chamber between training intervals. The platform shall contain stairs and railing which extend to the ground level. The deck of the platform shall be sufficiently reinforced to accommodate the live load of up to four firefighters in full personal protective equipment during loading and cleanup operations.

3.3.4 TEMPERATURE MONITORING SYSTEM
The Burn Chamber and Observation Chamber shall each contain temperature monitoring systems. Each temperature monitoring system shall contain an audible alarm which sounds when predetermined temperature thresholds are met. The temperature monitoring system shall be able to connect to a computer and display temperature data from each training session. The system shall also be designed to withstand prolonged heat.
3.3.5 SAMPLE FLASHOVER MODULE DESIGN
Below is a design of a sample Flashover Module. The Flashover Module provided by the awarded bidder does not have to look like the one below. The Flashover Module below serves as an example of the type of Flashover Module in which the County is seeking.

3.4 FLASHOVER MODULE DELIVERY/SET-UP
The Flashover Module shall be designed so as to be set-up onsite. The awarded bidder shall affix the Flashover Module to the 40’ long, 14’ wide concrete pad. The awarded bidder shall deliver and set-up/install the Flashover Module within one (1) month of this contract being awarded.

3.5 FLASHOVER MODULE ACCEPTANCE
The will be concerned accepted once it has been delivered, placed in the specified location (rear of MDFR training complex), inspected by the County’s representative, an initial operation has been performed and a train-the-trainer class has been completed.

3.7 MINIMUM REQUIREMENTS
Bidders must comply with each qualification below. Failure to meet any sub-section below, may result in the bidder being deemed non-responsive.

3.7.1 Bidder(s) shall have at least one (1) year of experience providing Flashover Modules and training curriculums/procedures on how to utilize the module.

3.7.2 Bidder(s) shall provide evidence of designing, manufacturing and installing at least three (3) or more Flashover Modules for customers, similar to one specified in this solicitation. For each Flashover Module listed, bidder(s) shall provide the name, phone number, email address and point of contact of the customer, a detailed description (including size and specifications) of each Flashover Module provided and the date of installation of each Flashover Module.

3.7.3 Bidder(s) shall provide a minimum of at least one year of warranty guaranteed by the manufacturer of the Flashover Module.

3.7.4 Bidder(s) shall be able to train MDFR staff on how to utilize the Flashover Module for observation of the flashover/rollover area, as well as train MDFR staff on the burn area for Class A combustible extinguishment.

3.7.5 Bidder(s) shall be able to provide a Flashover Module which is not greater than 40 feet long, 14 feet wide and 20 feet tall. Bidder(s) shall submit a copy of the specifications of the Flashover Module to be fabricated and a copy of the training plan/curriculum.