

MEMORANDUM

Agenda Item No. 8(E)(2)

TO: Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

DATE: March 4, 2025

FROM: Geri Bonzon-Keenan
County Attorney

SUBJECT: Resolution approving and authorizing the County Mayor to execute a Memorandum of Agreement between the Florida Department of Emergency Management ("FDEM") and Miami-Dade County, through the Miami-Dade Fire Rescue Department ("MDFR"), regarding the use of State-owned equipment to aid in disaster and emergency response efforts for a term of five years; and authorizing the County Mayor to exercise the provisions set forth in the Agreement and execute amendments thereto

Resolution No. R-232-25

The accompanying resolution was prepared by the Miami-Dade Fire and Rescue Department and placed on the agenda at the request of Prime Sponsor Commissioner Roberto J. Gonzalez.


Geri Bonzon-Keenan
County Attorney

GBK/jp

Memorandum



Date: March 4, 2025

To: Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

From: Daniella Levine Cava *Daniella Levine Cava*
Mayor

Subject: Resolution Authorizing the County Mayor or County Mayor's Designee to Execute a Memorandum of Agreement Between the Florida Department of Emergency Management and Miami-Dade County, through the Miami-Dade Fire Rescue Department, Regarding the Use of State-Owned Equipment

Summary

This item seeks authority for the County Mayor or County Mayor's designee to execute a Memorandum of Agreement (MOA) between The Florida Department of Emergency Management and Miami-Dade County through the Miami-Dade Fire Rescue Department (MDFR) regarding the use of certain State-owned equipment. The MOA establishes the terms and conditions under which FDEM will provide to the County (1) Cat 279D3 Compact Track Loader and (1) Gooseneck Trailer for official government use by the County. This MOA will strengthen Miami-Dade County's disaster preparedness, response, recovery, mitigation, and resilience efforts. The term of the MOA is five years from the date of execution, or the date the unit is no longer serviceable as determined by FDEM, whichever comes first.

Recommendation

It is recommended that the Board of County Commissioners (Board) authorize the County Mayor or County Mayor's designee to execute a MOA regarding the use of State-owned equipment from FDEM by MDFR to assist with disaster and emergency response efforts. The MOA also requires MDFR to assume responsibility for the costs of storage/staging, preventative maintenance, repair and necessary part replacements, testing, operations, fueling, and mobilizing of the equipment. While in the County's possession, the County may utilize the equipment for necessary official government purposes at the County's expense.

Scope

This resolution has nationwide impact as the equipment received from FDEM may be deployed by MDFR in other jurisdictions as necessary to effectuate official government purposes.

Delegation of Authority

The County Mayor or County Mayor's designee is authorized execute the attached MOA regarding the use of equipment from FDEM by MDFR for disaster and emergency response efforts. The County Mayor or County Mayor's designee is also authorized to exercise the provisions set forth in the MOA and execute amendments to said MOA provided that such amendments do not alter the term or purpose of the MOA.

Fiscal Impact/Funding Source

Upon the execution of the MOA by the County Mayor or County Mayor's designee, MDFR will claim responsibility for the costs of storage/staging, preventative maintenance, repair and necessary part replacements, testing, operations, fueling, and mobilizing of the equipment. MDFR will also provide FDEM with quarterly and yearly maintenance and operations reports. MDFR will not be responsible for costs when the equipment is redeployed by the State.

Track Record/Monitor

All equipment received will be tracked and monitored by the MDRF Grants Management Bureau.

Background

FDEM, through its efforts to enhance the State's disaster response capabilities, acquired various equipment to support disaster recovery and emergency response operations. In particular, the Cat 279D3 Compact Track Loader and Gooseneck Trailer were purchased to assist in the aftermath of Hurricane Debby, a significant event that required the State's rapid and efficient mobilization of resources. FDEM is partnering with counties, cities, and agencies across the State to position and maintain equipment and other critical assets. Miami-Dade Fire Rescue, as a key partner in emergency management and disaster response in Florida, has been engaged in ongoing efforts to bolster its preparedness and response capabilities.

To enhance MDRF's ability to respond to future disasters and emergencies, FDEM has agreed to allow the County to use, house, and maintain a Cat 279D3 Compact Track Loader and Gooseneck Trailer. Use of this equipment will allow MDRF to incorporate the equipment into its existing fleet of resources, ensuring its readiness and availability during future events. MDRF will assume full responsibility for the costs of storage/staging, preventative maintenance, repair and necessary part replacements, testing, operations, fueling, and mobilizing of the equipment while in MDRF's possession. During the term of this MOA, the County will provide FDEM with quarterly maintenance and operations reports detailing three continuous months in the reported quarter of maintenance efforts and usage and a summary of the overall condition of the equipment. A yearly report will be due 12 months following the MOA's date of execution. The termination date for the MOA is five years from the date of execution, or the date the unit is no longer serviceable as determined by FDEM, whichever comes first.



James Reyes
Chief of Public Safety



MEMORANDUM (Revised)

TO: Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

DATE: March 4, 2025

FROM: 
Glen Bonzon-Keenan
County Attorney

SUBJECT: Agenda Item No. 8(E)(2)

Please note any items checked.

- _____ **"3-Day Rule" for committees applicable if raised**
- _____ **6 weeks required between first reading and public hearing**
- _____ **4 weeks notification to municipal officials required prior to public hearing**
- _____ **Decreases revenues or increases expenditures without balancing budget**
- _____ **Budget required**
- _____ **Statement of fiscal impact required**
- _____ **Statement of social equity required**
- _____ **Ordinance creating a new board requires detailed County Mayor's report for public hearing**
- _____ **No committee review**
- _____ **Applicable legislation requires more than a majority vote (i.e., 2/3's present ____, 2/3 membership ____, 3/5's ____, unanimous ____, majority plus one ____, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) ____, CDMP 2/3 vote requirement per 2-116.1(3) (h) or (4)(c) ____, CDMP 9 vote requirement per 2-116.1(4)(c) (2) ____) to approve**
- _____ **Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required**

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(E)(2)
3-4-25

RESOLUTION NO. R-232-25

RESOLUTION APPROVING AND AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXECUTE A MEMORANDUM OF AGREEMENT BETWEEN THE FLORIDA DEPARTMENT OF EMERGENCY MANAGEMENT ("FDEM") AND MIAMI-DADE COUNTY, THROUGH THE MIAMI-DADE FIRE RESCUE DEPARTMENT ("MDFR"), REGARDING THE USE OF STATE-OWNED EQUIPMENT TO AID IN DISASTER AND EMERGENCY RESPONSE EFFORTS FOR A TERM OF FIVE YEARS; AND AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXERCISE THE PROVISIONS SET FORTH IN THE AGREEMENT AND EXECUTE AMENDMENTS THERETO

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board:

Section 1. Incorporates and approves the foregoing recital, as if fully set forth herein.

Section 2. Approves and authorizes the County Mayor or County Mayor's designee to execute, on behalf of Miami-Dade County, a Memorandum of Agreement, in substantially the form attached hereto and incorporated herein as Exhibit A, between Miami-Dade County, through the Miami-Dade Fire Rescue Department, and the Florida Department of Emergency Management regarding the use of a Cat 279D3 Compact Track Loader and Gooseneck Trailer to aid in disaster and emergency response efforts. This Agreement is for a five-year term and will strengthen Miami-Dade County's disaster preparedness, response, recovery, mitigation, and resilience efforts.

Section 3. Authorizes the County Mayor or County Mayor’s designee to exercise the provisions set forth in the Memorandum of Agreement, as well as execute any necessary amendments to the Memorandum of Agreement, provided that the amendments do not alter the term or purpose of the Memorandum of Agreement.

The foregoing resolution was offered by Commissioner **Raquel A. Regalado** , who moved its adoption. The motion was seconded by Commissioner **Marleine Bastien** and upon being put to a vote, the vote was as follows:

Anthony Rodriguez, Chairman	aye
Kionne L. McGhee, Vice Chairman	aye
Marleine Bastien	aye
Kevin Marino Cabrera	aye
Oliver G. Gilbert, III	absent
Keon Hardemon	absent
Eileen Higgins	absent
Micky Steinberg	aye
Juan Carlos Bermudez	aye
Sen. René García	aye
Roberto J. Gonzalez	aye
Danielle Cohen Higgins	aye
Raquel A. Regalado	aye

The Chairperson thereupon declared this resolution duly passed and adopted this 4th day of March, 2025. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this resolution and the filing of this approval with the Clerk of the Board.



MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF COUNTY
COMMISSIONERS

JUAN FERNANDEZ-BARQUIN, CLERK

By: **Basia Pruna**
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

A handwritten signature in black ink, appearing to be "SG" followed by a flourish.

Shanika A. Graves



STATE OF FLORIDA

DIVISION OF EMERGENCY MANAGEMENT

Ron DeSantis
Governor

Kevin Guthrie
Director

**MEMORANDUM OF AGREEMENT BETWEEN THE FLORIDA DIVISION OF EMERGENCY
MANAGEMENT AND THE MIAMI-DADE COUNTY REGARDING STATE-OWNED
EQUIPMENT**

I. Parties

- A. This Memorandum of Agreement (hereinafter referred to as "MOA") is made and entered into by and between the **State of Florida, Division of Emergency Management ("FDEM")**, whose address is 2555 Shumard Oak Blvd., Tallahassee, Florida 32399-2100, and the **MIAMI-DADE COUNTY (County)**, whose address is 9300 NW 41st St. Doral, FL 33178 and collectively known as the "Parties."

II. Background and Purpose

- A. Pursuant to section 252.35 Florida Statutes, FDEM maintains an inventory list of property owned by the state and local governments.
- B. In preparation for hurricane season, FDEM and State Emergency Response Team purchased equipment to support and assist in response efforts during an emergency. To maximize equipment utilization, the State is collaborating with Florida counties, cities, agencies, municipalities, and additional partners to position and maintain these critical assets throughout the State.
- C. The purpose of this MOA is to establish the terms and conditions under which FDEM will provide to the County: **ONE (1) CAT 279D3 Compact Track and ONE (1) Gooseneck Trailer** for official government use in support of County
- D. The applicable equipment identification is provided in Attachment A of this MOA.

III. Term and Termination

- A. This MOA is effective upon the date last signed and executed by the duly authorized representative of the Parties to this MOA. The term shall continue until the final suspense date of any equipment covered by this MOA.
- B. The suspense date for the equipment is 5 years from the date of execution, or the date the unit is no longer serviceable as determined by FDEM, whichever comes first.
- C. Termination of this MOA by either Party requires a thirty (30) day written notice delivered by hand, email, or certified mail to the address listed below.
- D. In the event, FDEM requests relocation or redeployment of the equipment before termination or expiration of this MOA, the terms and conditions within will become suspended until the equipment is returned to the **County** possession and will then resume under the original conditions of this MOA.

- E. In the event, the County wishes to terminate the MOA, the **(County)** will be responsible for the cost of transporting the equipment to a specified drop off destination, as determined by FDEM.

IV. General Provisions

A. Responsibilities of FDEM

- i. The equipment will be state-tagged and recorded.
- ii. The equipment is subject to relocation and redeployment in a future disaster or special event, at the request of FDEM. Costs associated with the relocation and redeployment will be paid for by the State (transportation, logistics, etc.).
- iii. FDEM will Provide onsite training to ensure equipment is being used properly.
- iv. The HET SOP document is provided as an appendix to MOA and must be reviewed before using the equipment.

B. Responsibilities of the County

- i. The County will be responsible for the costs of storing/staging, preventative maintenance, repair and necessary part replacements, testing, operations, fueling, and mobilizing/demobilizing of the equipment, except when the equipment is redeployed by the State.
- ii. The County must follow the maintenance requirements as outlined in Attachment B.
- iii. During the term of this MOA, the County will provide to FDEM a quarterly maintenance and operations report detailing three continuous months in the reported quarter of maintenance efforts and usage and a summary of the overall condition of the equipment. A yearly report will be due 12 months following the MOA date of execution. Pictures must be included to document any changes to the equipment's condition. Quarterly maintenance reports must be submitted to FDEM by email in adherence to the following schedule:

- **Q1 (July-September): Due no later than October 1**
- **Q2 (October-December): Due no later than January 1**
- **Q3 (January-March): Due no later than April 1**
- **Q4 (April-June): Due no later than July 1**

- iv. Maintenance reports requested by FDEM outside of the County's quarterly submission must be provided by the County no later than seven (7) days after request.
- v. The County can utilize the equipment for necessary official government purposes at the County's expense – to include maintenance.
- vi. The County will store, use, and maintain the equipment as per manufacturer's recommendations to ensure functionality and readiness.

- vii. The County is responsible for ensuring the equipment is maintained per manufacturer's requirements such that the warranties remain in full force and effect for the entire term at their expense.
- viii. When the County deems the equipment is no longer serviceable, they will coordinate with FDEM and FDEM, at its sole discretion, will make a determination as to the serviceability of the equipment.
- ix. During the term of this MOA, the County shall be responsible for replacement of the equipment, with a like item agreeable by the Division, if damaged while in the possession of the County and deemed not repairable to serviceable condition. The determination of repair and serviceability is at the sole discretion of FDEM.
- x. All warranties from the original manufacturer for the equipment and appurtenant equipment shall remain with FDEM. FDEM will coordinate warranty actions, when applicable, with both the manufacturer and the County.
- xi. County will ensure that all operators have taken the training FDEM will provide before they operate equipment.
- xii. County will provide the HET SOP document to each operator for them to review prior to use of equipment.

C. Miscellaneous

- i. All email correspondence directed at FDEM shall be sent to FDEMequipment@em.myflorida.com.
- ii. County noncompliance, related to section IV. General Provisions, B. Responsibilities of the County may result in termination of this MOA at the discretion of FDEM.
- iii. If terminated for noncompliance, the County will be responsible for the cost of transporting the equipment to a specified drop off destination, as determined by FDEM within thirty (30) days of notification.

V. Point of Contact

- A. In the event of a change to the point of contact, the new point of contact will notify the other party of this change within 30 days by written notice delivered by hand or certified mail to the address listed below.

B. The Point of Contact for FDEM is:

Name: Kemel Mayi, Accountable Property Officer
Email: Kemel.mayi@em.myflorida.com
Telephone: (448) 220-7164
Address: 2555 Shumard Oak Blvd.
Tallahassee, FL 32399-2100

C. The Point of Contact for the County is:

Name: Chief Brandon Webb, US&R FL-TF1 Program Manager
Email: Brandon.Webb@miamidade.gov
Telephone: (786) 331-4486
Address: 9300 NW 41st ST. Doral FL 33178

VI. Miscellaneous

- A. Nothing herein shall constitute or be construed to create or suggest any type or kind of employment, partnership, joint venture, or other legal relationship, express or otherwise, between the Parties.
- B. Liability - Each Party hereto agrees that it shall be solely responsible for the negligent or wrongful acts of its employees and agents. Nothing contained herein shall constitute a waiver by either Party of its sovereign immunity or the provisions of section 768.28, Florida Statutes. Nothing herein shall be construed as consent by either Party to be sued by third parties.
- C. Amendment - Either Party may request changes to this MOA. Any changes, modifications, revisions, or amendments to this MOA that are mutually agreed upon by and between the Parties to this MOA, shall be incorporated by written instrument and effective when executed and signed by all Parties to this MOA.
- D. This Agreement supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

IN WITNESS WHEREOF, the Parties hereto have caused this Memorandum of Agreement to be executed by their duly authorized representatives on the dates appearing beneath their respective signatures.

MIAMI DADE COUNTY

**FLORIDA DIVISION OF
EMERGENCY MANAGEMENT**

Signature

Signature

Printed Name

Printed Name

Title

Title

Date

Date

Memorandum of Agreement between the Florida Division of Emergency Management and
the **Miami-Dade** County Regarding State-Owned Equipment

Attachment A - Equipment Identification

(One (1) equipment identification page per item)

Equipment	Information
Name/Description	Gooseneck Trailer
Manufacturer	
Model	CAT 279D
Year Assembled	
VIN	1J9GF4026NJ43191
License Plate #	
Serial #	
FDEM Property ID # (CA or EM Tag #)	CA013277
EM Fleet Admin #	
Add-Ons/Plugs/Cables	
Additional Notes/Information	
FLSG will ensure that all operators have taken the training FDEM will provide before they operate equipment. FLSG will provide the HET SOP document to each operator for them to review prior to use of equipment.	

Memorandum of Agreement between the Florida Division of Emergency Management and
the **Miami-Dade** County Regarding State-Owned Equipment

Attachment A - Equipment Identification

(One (1) equipment identification page per item)

Equipment	Information
Name/Description	CAT 279D3 Compact Track Loader
Manufacturer	
Model	Compact track Loader
Year Assembled	
VIN	RB906813
License Plate #	
Serial #	
FDEM Property ID # (CA or EM Tag #)	ca013271
EM Fleet Admin #	
Add-Ons/Plugs/Cables	
Additional Notes/Information	
FLSG will ensure that all operators have taken the training FDEM will provide before they operate equipment. FLSG will provide the HET SOP document to each operator for them to review prior to use of equipment.	

September 1, 2024



State Emergency Response Team
Excavator & Heavy Equipment Team
Standard Operating Procedures



EXCAVATOR & HEAVY EQUIPMENT TEAM STANDARD OPERATING PROCEDURES

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EXCAVATOR & HEAVY EQUIPMENT TEAM STANDARD OPERATING PROCEDURES

SECTION 1: EXCAVATOR STANDARD OPERATING GUIDE

PURPOSE

For selective debris removal involving either trees or collapsed structures using a track driven excavator with a factory designed/engineered lifting point with a specified rating used in conjunction with OSHA certified lifting chains, polyester straps, polyester round slings, hooks, shackles, and a spreader bar/lifting beam with all components having designed lifting capacities.

MINIMUM REQUIREMENTS FOR EXCAVATOR OPERATORS

- Minimum of 750hrs of documented skid-steer operating hours
- Must meet the minimum requirements to be a skid-steer crew boss
- Must possess a Class A CDL

SAFETY

The operator always has the final decision on any operation

- Members must always have the following safety equipment donned when working on or around equipment being used:
 - Safety toe boots
 - Hard Hat
 - OSHA Class-3 Safety vest/shirt
 - Safety glass

LIFTING/RIGGING

- Rigging methods should always be discussed and approved by the excavator operator and rigger prior to lifting any material
- Once initial lift has begun, allow the load to move/settle prior to swinging of excavator boom
- Use tag line to control the material being lifted
- Follow all USAR Heavy Rigging procedures and guidelines

MINIMUM STAFFING REQUIREMENTS FOR DEPLOYMENT

- Certified excavator operator
- Certified USAR heavy rigger



EXCAVATOR & HEAVY EQUIPMENT TEAM

STANDARD OPERATING PROCEDURES

EXCAVATOR SPECS

CATERPILLAR 308 CR W/ HYDRAULIC THUMB

- Machine horsepower - 69.5
- Machine weight - 21,381 lbs.
- Transport length - 22.5 feet
- Transport Width - 8 feet
- Lifting Capacity/Breakout Force - 8433 lbs.
- Lifting Eye Capacity 4000 Kg (9800 lbs.) at 90 degrees

EXCAVATOR DEPLOYMENT MINIMUM INVENTORY LIST

- Ford F-550 4x4 43,000lbs GVW w/ 100gal auxiliary diesel fuel tank
- Gatormade 30'+5' 30,000lbs trailer
- Caterpillar 308CR excavator w/hydraulic thumb
- (2) portable radios
- Battery powered grease gun w/ (1) case of grease
- Cooler w/ drinking water
- (4) 3"x 6' polyester lifting straps w/ 8,900lbs. rating
- (4) 3"x 15' polyester lifting straps w/ 8,900 lbs. rating
- (2) blue polyester round slings w/ 21,200 lbs. rating
- (1) 15' 100 grade 3/8" four-way lifting chains including slack hooks w/ 15,200lbs. rating
- (1) 12' 100 grade 3/8" two-way lifting chains including slack hooks w/ 22,900lbs rating
- (1) 1-1/4" Campbell 12-ton safety shackle with 13-10 1/2 safety lifting hook
- (2) 1- 3/8" Campbell 13 ½-ton screw shackle
- (2) 1-1/2" Campbell 12-ton screw shackle
- (2) 1" Campbell 8 ½-ton screw shackle
- (2) 7/8" CM 8 ½-ton screw shackle
- (1) M&W 10' lifting spreader beam (weight 606 lbs.)
 - Working load limit 10,000 lbs.
 - Design Category-B
 - Service Class-2



EXCAVATOR & HEAVY EQUIPMENT TEAM STANDARD OPERATING PROCEDURES

SECTION 2:

HEAVY EQUIPMENT TEAM (H.E.T.) STANDARD OPERATING PROCEDURES

PURPOSE

To have trained fire service personnel that can be placed as heavy equipment operators, and to standardize operations for H.E.T. members, who will be the exclusive operators of heavy equipment involving USAR, ERAT, Wildland Urban Interface mitigation, or any other setting in which JFRD operates.

SAFETY

The operator always has the final decision on any operations involving a piece of heavy equipment. SAFETY IS ALWAYS THE TOP PRIORITY!

BASIC RESOURCES

PERSONNEL

The H.E.T. is limited to a maximum of sixty (60) personnel. Team members shall consist of fire personnel that have the minimum required training and knowledge to carry out the actions necessary to safely operate all heavy equipment assigned to the H.E.T. At no time shall non-trained JFRD personnel operate any piece of heavy equipment.

Prerequisites for acceptance into the JFRD H.E.T.:

- OSHA 10 Awareness
- TEEX HEP 700
- USAR
- ERAT

Current H.E.T. members have until September 1, 2025, to obtain:

- USAR
- CDL

CREW BOSS

Understands all machine capabilities and reactions. Has the ability to teach new team members and junior personnel safe and proper operation of equipment. Has the ability to lead and or direct all facets of the H.E.T. Requires 500 hours of documented heavy management via training or deployment hours.

- Must have a CDL, ERAT, USAR, Heavy Rigging, Red Card, OSHA Awareness 10 Hours, and OSHA Supervisor 30 Hours
- Consists of the most experienced operators
- Understands proper use of FEMA forms (212 WF, 213, 214, and 218)



EXCAVATOR & HEAVY EQUIPMENT TEAM STANDARD OPERATING PROCEDURES

- Demonstrates understanding and planning of G-grading, S-Sifting, and D- Delayering
- Ability to safely manage 5 or more pieces of heavy equipment running at the same time
- Complete understanding of all heavy equipment assigned to the H.E.T.

LEVEL 1

Has a high level of experience and maintains superior control over the heavy equipment without jerking movements. Has ability to operate “blind” while only being given HAND SIGNALS for guidance. Requires 250 hours of documented heavy equipment training or deployments.

- Must have a CDL, ERAT, USAR, Heavy Rigging, Red Card, OSHA Awareness 10 Hours, and OSHA Supervisor 30 Hours
- Demonstrates a high level of understanding of heavy equipment and implements
- Ability to operate safely with up to 5 machines running at once
- Ability to help with making operational plans
- Safely operate machines around people and tight areas
- Operator Level 1 required for all mulching deployments

LEVEL 2

Has some operating experience and limited or no experience with hand signals. The operator is not yet smooth on controls and does not pre-plan equipment movements. Maintains a basic understanding of how to operate heavy equipment but is either very slow or operates machine too fast (overconfident). Requires 40 hours of documented heavy equipment operation.

- Must have USAR, ERAT, and OSHA Awareness 10 Hours
- Has bucket, forks, and grapple training
- Ability to safely operate with up to 2 machines running at once

LEVEL 3

Has minimal experience and is uncomfortable operating heavy equipment. Demonstrates poor machine controls with jerky movements and has limited knowledge of controls. Trained on buckets and forks only. Requires 24 hours of documented heavy equipment operation.

Must have USAR, ERAT, and OSHA Awareness 10 Hours.

- Inability to operate heavy equipment without being directly supervised
- Limited to incidents where only one machine will be running at a time

PERSONAL PROTECTIVE EQUIPMENT

ALL PERSONNEL entering the hot zone of any H.E.T. incident shall always wear full PPE which includes:

- Gloves
- Helmet
- Eye Protection
- Steel Toe Boots
- Hi Visibility Shirt or Vest



EXCAVATOR & HEAVY EQUIPMENT TEAM STANDARD OPERATING PROCEDURES

- Chainsaw chaps (Cut Team)
- Ear Protection (Cut Team)

TRANSPORTING H.E.T. EQUIPMENT

You MUST have a Class A CDL to drive any H.E.T. truck that has a GVWR of 26,000 lbs. or greater.

POST DEPLOYMENT RESPONSIBILITIES

Within 48 hours after deployment the following must be decontaminated:

- Trucks
- Trailers
- Machines
- Attachments
- Support Vehicles

RECERTIFICATIONS

Annual recertification shall be completed prior to June 1st.

TRAINING

In preparation for hurricane season, training shall take place monthly between March 1st and May 31st

Outside of that time period, all other training shall occur quarterly



EXCAVATOR & HEAVY EQUIPMENT TEAM STANDARD OPERATING PROCEDURES

APPENDIX A: ADDITIONAL INFORMATION (Not Testable)

HEAVY EQUIPMENT TEAM SAFETY

THE FOCUS FOUR HAZARDS

The four main categories of hazards that cause the most injuries and fatalities.

- Caught in or between
- Electrical
- Slips, trips, and falls
- Struck-by

COMMUNICATION HAZARDS

Lack of communication creates a dangerous jobsite. Most accidents happen simply because someone didn't say something.

UTILITY HAZARDS

Every year people get injured due to unexpected contact with buried utilities.

ELECTRICAL HAZARDS

Unintentional electrical contact can occur in all stations.

- Overhead
- Above ground
- Below ground

GAS LINE UTILITIES

Gas lines can be found at ground level but are more commonly buried.

EQUIPMENT HAZARDS

Poor communication causes the most injuries and fatalities when working around heavy equipment. Noise, weather conditions, and visibility will all affect the level of danger when operating equipment.

HAZARDOUS WORK CONDITIONS

Working conditions involve several factors, such as weather, lighting, visibility, and footing. Hazardous conditions arise when any of these conditions are less than ideal.

WEATHER CONDITIONS

Deteriorating weather conditions increase hazards.

- Storms
- Fog



EXCAVATOR & HEAVY EQUIPMENT TEAM

STANDARD OPERATING PROCEDURES

- Snow/Cold
- Rain/Flooding Inadequate Lighting

Twilight can descend without preoccupied equipment operators noticing. Artificial light can create a glare that is more difficult to work in than natural daylight.

LIMITED VISIBILITY

Visibility is often limited when working on or around heavy equipment. Load height may hinder sight distance in the following ways:

- To extend distance on each side
- Directly behind equipment
- Directly in front of equipment
- Rollover Protective Structures (ROPS) can cause blind spots Footing Hazards

Uneven ground is a common cause of slip, trip, and fall accidents. Types of footing hazards are as follows:

- Ungraded or unlevel ground
- Change in weather conditions
- Difficult soil types
- Vegetation
- Debris

PEOPLE HAZARDS

People who work in or around the equipment can be hazards themselves. Operators and Workers

Workers tend to be unaware of dangers around them because they are:

- Concentrating on their jobs
- In a hurry
- Feeling pressured to finish

HURRYING = ACCIDENTS

Pedestrians and Bystanders

Pedestrians and bystanders often do not have the knowledge or understanding to realize when they are at risk of injury.

JOB SAFETY BRIEFINGS

Before each work shift, the crew boss should conduct a job safety briefing with all H.E.T. members.

Elements of Job Safety Briefing

The job safety briefing should cover the following elements:

- Work procedures
- Special precautions



EXCAVATOR & HEAVY EQUIPMENT TEAM

STANDARD OPERATING PROCEDURES

- Communication signals to be used between machine operators and workers outside of heavy equipment
- Equipment to be utilized
- Required PPE

COMMUNICATION

Verbal Communication

Verbal communication is vitally important when working in a construction work zone.

Two-Way Radios

Two-way radios and walkie-talkies, make communication easier and increase safety around heavy equipment.

Cellular Phones

Cell phones should only be used for work purposes. Never operate heavy equipment while using headphones.

Equipment Horns

Operators must blow the horn before they begin operating heavy equipment as a warning to other workers on the jobsite. The type of horn, duration, and number of signals have different meanings (moving forward, in reverse, etc.,).

EQUIPMENT KNOWLEDGE

Operators must have detailed knowledge of heavy equipment for safety and to prevent damage to bridges, buildings, powerlines, and other hazards that may pose contact or struck-by hazards.

Equipment Dimensions

It is important to know the equipment dimensions to ensure safe use of heavy equipment in varying work environments. The dimensions of the equipment may change when attachments or implements are added or when a load is handled.

Equipment Height

It is essential that operators know the working height of the heavy equipment. Never raise equipment until the height is determined and the operator can ensure it is safe.

TRANSPORTING HEAVY EQUIPMENT

When transporting equipment, consideration must be given to the height of the trailer in addition to the height of the equipment.

- Measure the deck height of the trailer
- Add the height of the machine
- Add the height of any attachments

Example:

Height of empty trailer deck: 3 feet, 2 inches



EXCAVATOR & HEAVY EQUIPMENT TEAM

STANDARD OPERATING PROCEDURES

+ Height of equipment: 9 feet, 1 inch

+ Height of any additional accessories: 0 inches

= Total height: 12 feet, 3 inches

EQUIPMENT AND VEHICLE INSPECTIONS

At the beginning of each work shift, operators should conduct a walk-around inspection of the heavy equipment or vehicle they will be operating. Check the following:

- Windows and ROPS
- Connections, wires, belts, and hydraulics
- Tracks
- Fluid levels
- Worn or loose parts
- Safety devices

HEAVY EQUIPMENT OPERATORS

- Operators shall stay seated while in motion
- Fasten seatbelt before starting the machine
- Sound the horn before moving the machine

PREVENTATIVE MAINTENANCE

Perform maintenance when the machine is turned off and in a stationary position. Maintenance

Periodic maintenance is essential and should be conducted at regular intervals. A maintenance log should be used to track all damage, maintenance, repairs, and services performed. Dirt and debris should always be removed before and after use of any heavy equipment, particularly around the steps and rails.

SAFE WORK CLEARANCE

OSHA has established a minimum safe working clearance of 25 feet when working near high voltage powerlines. Working distance increases as voltage increases.

ERAT DEPLOYMENT MINIMUM INVENTORY LIST

Each piece of heavy equipment needs the following:

- Truck
- Trailer
- Skid steer
- 2 Grade 100 3/8" chains with blue and green hooks (rated at 8800 pounds at 90 degrees)
- 2 Ratchet straps
- 2 Ratchet binders
- Battery powered grease gun
- Extra Grease
- Pigtail from truck to trailer



EXCAVATOR & HEAVY EQUIPMENT TEAM

STANDARD OPERATING PROCEDURES

- Cooler
- Blower
- Extra filters
- Grapple
- Grading bucket
- Forks
- Portable radio

MULCHING DEPLOYMENT MINIMUM INVENTORY LIST

Each piece of heavy equipment needs the following:

- Truck
- Trailer
- Skid steer
- 2 Grade 100 3/8" chains with blue and green hooks (rated at 8800 pounds at 90 degrees)
- 2 Ratchet straps
- 2 Ratchet binders
- Battery powered grease gun
- Extra grease
- Pigtail from truck to trailer
- Cooler
- Blower
- Extra filters
- Mulching head (HM315C for the 299D3 and HM415C for the 299D3 XE Land Management)
- Portable radio

DELAYERING DEPLOYMENT MINIMUM INVENTORY LIST

Each piece of heavy equipment needs the following:

- Truck
- Trailer
- Skid steer and/or excavator with thumb attachment
- 2 Grade 100 3/8" chains with blue and green hooks (rated at 8800 pounds at 90 degrees)
- 2 Ratchet straps
- 2 Ratchet binders
- Battery powered grease gun
- Extra grease
- Pigtail from truck to trailer
- Cooler
- Blower
- Extra filters



EXCAVATOR & HEAVY EQUIPMENT TEAM

STANDARD OPERATING PROCEDURES

- Grapple
- Grading bucket
- Portable Radio

RUBBLE SEARCH MINIMUM INVENTORY LIST

Each piece of heavy equipment needs the following:

- Truck
- Trailer
- Skid steer and/or excavator with thumb attachment
- 2 Grade 100 3/8" chains with blue and green hooks (rated at 8800 pounds at 90 degrees)
- 2 Ratchet straps
- 2 Ratchet binders
- Battery powered grease gun
- Extra grease
- Pigtail from truck to trailer
- Cooler
- Blower
- Extra filters
- Grading bucket
- Sifter bucket
- Portable radio

SKID STEER SPECIFICATIONS

CAT 299D3

- Weight: 11,464 lbs.
- HP: 98
- Lifting Capacity: 3,480 lbs.
- 35% Tipping Load

CAT 299D3 XE Land Management

- Weight: 12,800 lbs.
- HP: 110
- Lifting Capacity: 4,340 lbs.
- 35% Tipping Load Implements Specifications

Implements Specifications

- Forks: Weight 430 lbs.
- Grading Bucket: Weight 700 lbs.
- Sifter Bucket: Weight 1,200 lbs.
- Grapple: Weight 1,115 lbs. Length 40" Width 84" Height 33"



EXCAVATOR & HEAVY EQUIPMENT TEAM

STANDARD OPERATING PROCEDURES

- Lift Arm: Weight 200 lbs. Max Reach 84" Max Load 2000 lbs.
- Mulching heads:
 - HM315C - Weight 2959 lbs., Height 58", Width 74", Working width 62", Optimal hydraulic pressure 2900-4000 PSI, Optimal flow 31-33 GPM, Drum speed 2100-2400 RPM, Max cutting diameter 8", Max cutting depth 4.1", Number of teeth on drum 34
 - HM415C - Weight 2959 lbs. Height 58", Width 74", Working width 59", Optimal hydraulic pressure 2900-5077 PSI, Optimal flow 36-41 GPM, Drum speed 1900-2200 RPM, Max cutting diameter 8", Max cutting depth 4.1", Number of teeth on drum 34

ATTACHEMENT PRE-CHECK AND HOOK-UP

Hooking and unhooking multiple attachments:

- Disconnect hoses
- Visually check pin locks
- Release pressure off hydraulic system
- Inspect attachment for broken welds, bends, dirt build up, etc., prior to connecting

LOADING AND UNLOADING HEAVY EQUIPMENT

- Use two personnel, when possible, during the loading and unloading process. This is mandatory on all USAR deployments, ERAT, and during any nighttime hours.

Moving Equipment Short Distances

- Heavy equipment must be fully secured to trailers even when moving short distances.

Securing Equipment

- Use 100 grade chains, 3/8" with green and blue hooks (8800 lbs. at 90 degrees).

REQUIRED DAILY CHECK-OFF TASKS

- Clean tracks
- Check and clean air filter
- Check and clean radiator condenser
- Check and clean A/C filter
- Clean debris from top of machine
- Clean Zerk grease fittings
- Clean cab
- Clean front window
- Clean dirt and debris from attachment points
- Check fuel level
- Check oil level
- Check DEF level
- Check hydraulic fluid level
- Check window washer fluid level
- Grease machine (no more than 2-3 pumps on the grease gun)



EXCAVATOR & HEAVY EQUIPMENT TEAM STANDARD OPERATING PROCEDURES

APPENDIX B: APWA UNIFORM COLOR CODE

APWA Uniform Color Code

For Marking/Identifying Underground Utility Lines

Blue	Potable water
Pink	Temporary survey markings
Orange	Communication, alarm or signal lines, cables, or conduit
Yellow	Gas, oil, steam, petroleum, or gaseous materials
Red	Electric power lines, cables, conduit, and lighting cables
White	Proposed excavation
Green	Sewers and drain lines
Purple	Reclaimed water, irrigation, and slurry lines

Know what's below. Call before you dig.

1-800-344-8377

1-800-DIG-TESS

811



EXCAVATOR & HEAVY EQUIPMENT TEAM STANDARD OPERATING PROCEDURES

APPENDIX C: ASME CRANE HAND SIGNALS

ASME Crane Hand Signals



STOP



EMERGENCY STOP



RAISE BOOM



**RAISE BOOM AND
LOWER LOAD**



TROLLEY TRAVEL



**EXTEND TELESCOPING
BOOM**



**RETRACT TELESCOPING
BOOM**



TRAVEL, BOTH TRACKS

Attachment C - Required Maintenance Schedule - **Skid Steers/Compact Track Loaders**

Pre/Post-Start Inspection Report

End user is responsible for performing all required maintenance according to the manufacturer specifications found in the product's online user manual. The inspection and maintenance reports are intended for general service.

Model/SN:

Pre-Start Inspection	Initials	Date
Inspect bucket and cutting edges		
Check for damage to glass or windows		
If skid steer, inspect tires (cuts, wear, pressure, lugs)		
If track loader, inspect tracks		
Inspect ladder/grab handles		
Inspect hydraulic cylinder lines		
Check hydraulic fluid level		
Check for leaks (exterior and motor)		
Check engine oil level		
Check coolant level		
Inspect belts		
Check air filter		
Inspect seat belt and seat bar		

Post-Start Inspection	Initials	Date
Check park brake		
Check horn		
Check bucket/attachment (tilt up/down)		
Check lift arm (up/down)		
Check steering		
Check forward/reverse function		
Check backup alarm		
Inspect transmission and engine noise		
Check indicators and lights		
Check fuel		

Memorandum of Agreement between the Florida Division of Emergency Management
and the **Miami-Dade County** Regarding State-Owned Equipment

Attachment C - Required Maintenance Schedule -
Skid Steers/Compact Track Loaders

By Service Hours Report

Model/SN:

Maintenance Based on Service Hours	Initials	Date
Every 10 hours, clean/inspect air cleaner dust valve		
Every 10 hours, lubricate axle bearings		
Every 10 hours, test backup alarm		
Every 10 hours, inspect/replace bogie and idler		
Every 10 hours, check cooling system level		
Every 10 hours, inspect/clean engine compartment		
Every 10 hours, check engine oil level		
Every 10 hours, check equipment lowering control valve		
Every 10 hours, drain fuel system primary filter (water separator)		
Every 10 hours, check hydraulic system oil level		
Every 10 hours, lubricate lift arm and cylinder linkage		
Every 10 hours, clean/inspect quick coupler		
Every 10 hours, inspect seat belt		
Every 10 hours, check sprocket retaining nuts		
Every 10 hours, lubricate tilt cylinder bearings and bucket linkage bearings		
Every 10 hours, check tire inflation		
Every 10 hours, inspect/adjust track and track rubber		
Every 10 hours, inspect/replace track roller and idler		
Every 10 hours, tighten wheel nuts		
Every 10 hours, lubricate work tool		
Every 10 hours, inspect work tool mounting bracket		
Every 50 hours, inspect track pins		
Every 250 hours, inspect/adjust belts		
Every 250 hours, obtain engine oil sample		
Every 250 hours, check final drive oil level		
Every 500 hours, replace cab air filter		
Every 500 hours, change engine oil and filter		
Every 500 hours, inspect/replace hoses and clamps		
Every 1000 hours, replace belts		
Every 1000 hours, replace hydraulic system oil filter		