# Ocala Planning & Zoning Commission Agenda -Final Monday, November 10, 2025

#### **Meeting Information**

Location
City Hall
City Council Chambers
(2nd Floor)
110 SE Watula Avenue
Ocala, FL 34471

ON COUNTY, F

*Time* 5:30 PM

**Board Members** 

Jamie Boudreau
Tucker Branson
Elgin Carelock
Kevin Lopez, Chairman
Daniel London
Justin MacDonald
Buck Martin
Allison Campbell (non-voting), School
Board Representative

Staff
Jeff Shrum, AICP
Director
Growth Management Department

Aubrey Hale Planning Director Growth Management Department

Endira Madraveren Chief Planning Official Staff Liaison

Gabriela Solano Committee Secretary

#### WELCOME!

We are very glad you have joined us for today's meeting. The Planning and Zoning Commission (P & Z) comprises citizen members who voluntarily and without compensation devote their time and expertise to a variety of zoning and land development issues in the community. For many types of cases, the P& Z acts in an advisory capacity to the Ocala City Council with its recommendations subject to final action by Council.

#### GENERAL RULES OF ORDER

The P & Z is pleased to hear all non-repetitive comments. However, since a general time limit of five (5) minutes is allotted to the proponents/opponents of an issue, large groups are asked to name a spokesperson.

Persons with disabilities needing assistance to participate in any of these proceedings should contact the P & Z Recording Secretary at (352) 629-8404 at least 48 hours in advance of the meeting.

#### **APPEALS**

Any person who desires to appeal any decision at this meeting will need a record of the proceedings and for this purpose may need to ensure that a verbatim record of the proceedings is made that includes the testimony and evidence upon which the appeal is made.

This meeting and past meetings may be viewed by selecting it https://www.ocalafl.gov/meetings.

- 1. Call to Order
  - a. Pledge of Allegiance
  - b. Roll Call for Determination of a Quorum
  - c. Agenda Notes:

Cases heard by the Planning and Zoning Commission will be presented to City Council in accordance with the schedule provided after each case in the agenda. Please note that the City Council meetings will begin at 4:00 p.m.

2. Proof of Publication

It was acknowledged that a Public Meeting Notice was posted at City Hall (110 SE Watula Avenue, Ocala, Florida 34471) and published in the Ocala Star Banner on October 24, 2025.

- a. Ocala Gazette Ad
- 3. Approval of Minutes
  - a. October 13, 2025 Meeting Minutes
- 4. Public Hearing
  - a. Public Hearing for reduction in parking requirements in excess of ten percent for Lot 2,

    West Oak Phase 1, Plat Book 16, Page 47 (Parcel 21385-002-00); approximately 5.86

    acres

Presentation By: Breah Miller

- 5. Rezoning
  - a. Ordinance to rezone approximately 3.57 acres for a portion of the property located at 2336 NW 7th Street (Parcel 22682-000-00) from M-1, Light Industrial, to M-2, Medium Industrial (Case ZON25-0014) (Quasi-Judicial)

Presentation By: Emily Johnson

- 6. Code Amendment
  - a. Ordinance to amend the code of ordinances Section 122-1225 to authorize the use of above-ground air curtain burners as an ancillary use to a Materials Recovery Facility as well as establishing conditions and limitations relating to such ancillary use (COD25-0004).

Presentation By: Emily W. Johnson

- 7. Public Comments
- 8. Staff Comments
- 9. Board Comments
- 10. Next meeting: December 8, 2025
- 11. Adjournment



# Ocala

110 SE Watula Avenue Ocala, FL 34471

www.ocalafl.gov

# Legislation Text

File #: 2026-0198 Agenda Item #: a.

Submitted By: JaNiece Lucky

Department: Growth Management

FORMAL TITLE:
Ocala Gazette Ad

OCALA'S RELEVANT STRATEGIC GOALS:
Operational Excellence

PROOF OF PUBLICATION:
Ocala Gazette October 24, 2025

BACKGROUND:
N/A

Ocala Page 1 of 1 Printed on 11/7/2025



# NOTICE OF PUBLIC HEARING OCALA PLANNING AND ZONING COMMISSION

petitions at its meeting on Monday, October 13, 2025, commencing at 5:30 pm, in the City Council Chambers located on the Second Floor of City Hall at 110 SE Watula Avenue. The meeting may be viewed live by selecting it at https://www.ocalafl.gov/meetings.

The Ocala Planning & Zoning Commission will consider the following

# NORTHWEST Petitioner: Friends Recycling, LLC and Friends Real Estate Holdings LLC;

## Agent: Austin Dailey, Klein & Klein, LLC; Case: LUC25-0005; A request to

change the Future Land Use designation from Medium Intensity/Special District to Employment Center, for properties located at 2500 NW 31st Avenue (Parcel 21454-000-00); approximately 10.36 acres.

Petitioner: Friends Recycling, LLC and Friends Real Estate Holdings LLC; Agent: Austin Dailey, Klein & Klein, LLC; Case: ZON25-0012; A request to rezone from R-1, Single-Family Residential District, and R-2, Two-Family

Residential District to M-1, Light Industrial, for property located at 2500 NW 31<sup>st</sup> Avenue (Parcels 21454-000-00), approximately 10.36 acres.

OTHER
Petitioner: A Plus Homes, Inc; Agent: James W. Gooding, III, Gooding and Batsel, PLLC; Case: COD25-0003; A request to change the code of ordinances

by amending the permitted uses of the M-1, Light Industrial, zoning district to include Churches/Places of Worship on major and minor arterial roadways and

JEFF SHRUM, AICP DIRECTOR, GROWTH MANAGEMENT DEPARTMENT

specify supplemental regulations for said use.

and 5:00 p.m., Monday through Friday.

The agenda and material related to items on each agenda will be available in advance online at <a href="https://www.ocalafl.gov">www.ocalafl.gov</a>.

Interested parties may appear at the meeting and be heard regarding their opinion of the proposed cases. Copies of the proposed cases are available and

may be reviewed at the Growth Management Department, 201 SE 3<sup>rd</sup> Street, Second Floor, Ocala, telephone (352) 629-8404, between the hours of 8:00 a.m.

If reasonable accommodations are needed for you to participate in this meeting, contact the Growth Management Department at (352) 629-8404, 48 hours in advance, so those arrangements can be made.

contact the Growth Management Department at (352) 629-8404, 48 hours in advance, so those arrangements can be made.

Any person who decides to appeal any decision of the Ocala Planning and

Zoning Commission with respect to any matter considered at this meeting 4 ill need a record of the proceedings, and for such purpose may need to ensure that a verbatim record of the proceedings is made.



# Ocala

110 SE Watula Avenue Ocala, FL 34471

www.ocalafl.gov

# Legislation Text

File #: 2026-0269

Agenda Item #: a.

Submitted By: JaNiece Lucky

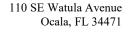
Department: Growth Management

FORMAL TITLE:
October 13, 2025 Meeting Minutes

OCALA'S RELEVANT STRATEGIC GOALS:
Operational Excellence

PROOF OF PUBLICATION:
N/A

BACKGROUND:
N/A





# Ocala

# Planning & Zoning Commission Minutes

www.ocalafl.gov

# Monday, October 13, 2025

#### 5:30 PM

- 1. Call to Order
  - a. Pledge of Allegiance
  - b. Roll Call for Determination of a Quorum

Present Tucker Branson, Daniel London, Justin MacDonald, Allison

Campbell, and Elgin Carelock

**Absent** Buck Martin

**Excused** Kevin Lopez

c. Agenda Notes:

Cases heard by the Planning and Zoning Commission will be presented to City Council in accordance with the schedule provided after each case in the agenda. Please note that the City Council meetings will begin at 4:00 p.m.

2. Proof of Publication

It was acknowledged that a Public Meeting Notice was posted at City Hall (110 SE Watula Avenue, Ocala, Florida 34471) and published in the Ocala Gazette on September 26, 2025.

a. Ocala Gazette Ad

Attachments: P&Z Draft Ad PROOF 10132025

3. Approval of Minutes

There being no further discussion the motion carried by roll call vote.

a. September 8, 2025 Meeting Minutes

**Attachments:** September 8, 2025 Meeting Minutes

**RESULT:** APPROVED

MOVER: Elgin Carelock

**SECONDER:** Justin MacDonald

**AYE:** Branson, London, MacDonald, and Carelock

**ABSENT:** Martin **EXCUSED:** Lopez

- 4. Land Use Change
  - a. Ordinance to change the Future Land Use designation on approximately 10.36 acres (Parcel 21454-000-00) located at 2500 NW 31st Avenue from Medium Intensity/Special District to Employment Center (Case LUC25-0005) (Quasi-Judicial)

Attachments: LUC25-0005 Friends Recycling Staff Report

<u>LUC25\_0005\_Case</u> <u>LUC25\_0005\_Aerial</u>

Senior Planner, Emily Johnson, displayed maps and various photos of the property and adjacent properties while providing staff comments and findings of fact for LUC25-0005.

Fred Roberts, 40 SE 11th Avenue, Ocala, FL, explained the property was part of a land exchange between the City of Ocala and the owner of Friends Recycling. He stated that the proposed land use change is intended to align with the anticipated use of the Friends Recycling property. The rezoning to M-1 will be a step down from the current M-2 zoning. Mr. Roberts clarified that there is no expansion of the landfill. The rezoning is to support the future intended uses of the property, which are to be more commercial in nature and consistent with the anticipated operations of Friends Recycling.

Anton Miller, 2410 NW 31st Street, Ocala, FL, expressed concerns regarding odors from the property, noting that many nearby residents have experienced serious health issues, including cancer. He stated he only recently learned about the proposal and wished he had been informed sooner. Mr. Miller asked whether any impact studies had been conducted to determine potential adverse effects on surrounding properties. Mr. London responded that this meeting served as a forum for public comment.

Mr. London asked for clarification that the request did not involve an expansion of the recycling operations, but rather a change to the future land use designation and rezoning. Mr. Roberts confirmed that this was correct.

Jeff Shum, Growth Management Director, clarified the Land Use Change involves a reduction in density and intensity, decreasing form 30 units per acre to 24 units per acre. He further explained the Floor Area Ratio maximum is 4 which is being reduced to 2.

Motion to approve to change the Future Land Use designation on approximately 10.36 acres (Parcel 21454-000-00) located at 2500 NW 31st Avenue from Medium Intensity/Special District to Employment Center.

**RESULT:** APPROVED

MOVER: Justin MacDonald SECONDER: Tucker Branson

**AYE:** Branson, London, MacDonald, and Carelock

**ABSENT:** Martin **EXCUSED:** Lopez

## 5. Zoning

a. Ordinance to rezone approximately 10.36 acres (Parcel 21454-000-00) located at 2500 NW 31st Avenue from R-1, Single-Family Residential and R-2, Two-Family Residential to M-1, Light Industrial (Case ZON25-0012) (Quasi-Judicial)

Attachments: ZON25-0012 Friends Recycling

<u>ZON25 0012 Case</u> <u>ZON25 0012 Aerial</u>

Senior Planner, Emily Johnson, displayed maps and various photos of the property and adjacent properties while providing staff comments and findings of fact for ZON25-0012.

Motion to approve to rezone approximately 10.36 acres (Parcel 21454-000-00) located at 2500 NW 31st Avenue from R-1, Single-Family Residential and R-2, Two-Family Residential to M-1, Light Industrial.

**RESULT:** APPROVED

MOVER: Justin MacDonald SECONDER: Tucker Branson

**AYE:** Branson, London, MacDonald, and Carelock

**ABSENT:** Martin **EXCUSED:** Lopez

#### 6. Code Amendment

a. Public Hearing to amend the code of ordinances permitted uses of the M-1, Light Industrial, zoning district to include Churches/Places of Worship on major and minor arterial roadways subject to supplemental regulations (COD25-0003).

Attachments: COD25-0003 Redlined Ordinance

COD Impact Map M-1 Zoning District

Senior Planner, Emily Johnson, displayed maps and various photos of the property and adjacent properties while providing staff comments and findings of fact for COD25-0003.

Jimmy Gooding, 1531 SE 36th Avenue, Ocala, FL, explained that the applicant intends to use the front portion of the property for a medical office and the rear portion for a church.

Motion to approve to amend the code of ordinances permitted uses of the M-1, Light Industrial, zoning district to include Churches/Places of Worship on major and minor arterial roadways subject to supplemental regulations.

**RESULT:** APPROVED

MOVER: Justin MacDonald SECONDER: Elgin Carelock

**AYE:** Branson, London, MacDonald, and Carelock

**ABSENT:** Martin **EXCUSED:** Lopez

7. Public Comment

None.

8. Staff Comments

None.

9. Board Comments

None.

10. Next meeting: November 10, 2025

11. Adjournment

Meeting adjourned at 6:00 PM.



# Ocala

110 SE Watula Avenue Ocala, FL 34471

www.ocalafl.gov

Legislation Text

**File #:** 2026-0193 Agenda Item #: a.

Submitted By: Breah Miller

**Presentation By:** Breah Miller

**Department:** Growth Management

#### **FORMAL TITLE:**

Public Hearing for reduction in parking requirements in excess of ten percent for Lot 2, West Oak Phase 1, Plat Book 16, Page 47 (Parcel 21385-002-00); approximately 5.86 acres

#### **OCALA'S RELEVANT STRATEGIC GOALS:**

Quality of Place

#### PROOF OF PUBLICATION:

N/A

#### **BACKGROUND:**

• Petitioner: Madison Oaks East, LLC

• Property Owner: West Oak Developers, LLC

• Agent: Stacy Banach

The subject property is an undeveloped lot within the West Oaks Phase 1 subdivision. The applicant is proposing to develop a 102-unit affordable senior living housing apartment, a 47-parking space reduction from Sec. 122-1010 of the Land Development Regulations. The development has been submitted for site plan approval.

#### FINDINGS AND CONCLUSIONS:

The applicant provided a parking study prepared by Hamilton Engineering using the Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition. The summary analysis provided identifies the affordable housing project at the 85th percentile rate (0.80 spaces per unit), which has a peak parking demand of approximately 81.6 spaces. The applicant proposes 106 parking spaces, which exceeds the ITE parking demand for the proposed use by approximately 17 spaces.

Staff Recommends Approval with the following condition:

1. The parking analysis was based on Land Use Code 223 - Affordable Housing (Senior) for 102 units.

Should the proposed use change, a new parking study will be required.

# **FISCAL IMPACT:**

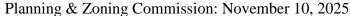
N/A

# **LEGAL REVIEW:**

This Agreement will be reviewed and approved for form and legality by City Attorney, William E. Sexton.

# **ALTERNATIVE:**

- Approve with Changes
- Table
- Deny





**Petitioner:** Madison Oaks East, LLC

**Property Owner:** West Oak Developers, LLC

**Agent:** Stacy Banach, New South Residential, LLC

**Project Planner:** Breah Miller, Planner II

**Applicant Request:** A Public Hearing request for reduction in parking requirements in

excess of ten percent

#### **Parcel Information**

Acres:  $\pm 5.86$  acres

Parcel(s) #: 21385-002-00

Location: Lot 2, West Oak Phase 1, Plat Book 16, Page 47

Future Land Use: Medium Intensity/Special District

Zoning District: PD, Planned Development

Existing Use: Undeveloped

Figure 1. Aerial Location Map



Page 1 of 4

# **Adjacent Property Information**

<u>Direction</u>	Future Land Use	<b>Zoning District</b>	Current Use
North	Medium Intensity/ Special District	PD, Planned Development	Tract B of West Oak Phase 1 reserved for WRA
East	Commerce District (County)	M-1, Light Industrial (County)	A & A Trucking & Excavating
South	Medium Intensity/ Special District	PD, Planned Development	Undeveloped West Oak Developers Property
West	Medium Intensity/ Special District	PD, Planned Development	Madison Oaks West Apartments (96 units)

## **Applicant Request**

The petitioner is requesting a reduction in parking requirements in excess of ten percent pursuant to Sec. 122-1016. The request is to reduce the required parking as identified in Sec. 122-1010 from 153 spaces to 106 spaces for the development of Madison Oaks East Senior Living Apartments.

#### **Background:**

The overall West Oak subdivision spans approximately 222.58 acres, located south of NW 35th Street, east of NE 27th Avenue, and north of SW 21st Street. Historically, the area was characterized by residential and semi-rural land use, with scattered housing and underutilized parcels. In 2020, the City entered into a Redevelopment Agreement for the former Pine Oaks Golf course to facilitate the redevelopment of the property into a mixed-use residential community. The West Oak PD rezoning and plan were approved in February 2021. Several amendments to the PD have occurred, adding a 5.83-acre drainage retention area expanding the boundaries of the PD (PD23-45234). Updated PD plan and design standards were adopted by City Council in August 2023 as part of this amendment.

This application applies to Lot 2 of the West Oak Phase 1 subdivision, encompassing approximately 5.86 acres. The property is currently undeveloped, with a site plan (SPL25-0058) under review, which proposes the construction of a 102-unit affordable senior housing apartment complex.

In September 2025, the applicant was invited to a pre-application meeting with City staff to discuss a parking reduction associated with the proposed development. Pursuant to Section 122-1016(d)(2) due to the extent of the reduction which exceeds ten percent of the required parking, a parking study and a public hearing were determined to be necessary prior to final site plan approval.

# **Staff Analysis**

Pursuant to Section 122-1010 of the Code of Ordinances, multi-family residential developments are required to provide 1.5 parking spaces for each dwelling unit. An applicant may submit a parking study Pursuant to Section 122-1016 of the Code of Ordinances to reduce the parking requirements if the requirements are inappropriate as applied to a specific property or project.

A typical multi-family 102-unit apartment development requires 153 parking spaces when applying the 1.5 parking spaces per unit requirement. The proposed reduction to 106 spaces will result in a 47-parking space deficit. The proposed multi-family development differs from a typical multi-family project in that it will be specifically for affordable age-restricted senior living.

The applicant has provided a parking study prepared by Hamilton Engineering using the Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition. Hamilton Engineering used ITE Land Use Code 223 – Affordable Housing (Senior) for their analysis. The ITE definition for Land Use Code 223 - Affordable Housing (Senior) states that Affordable Housing is "a use that includes all multi-family housing rented at below-market rates to households that include at least one employed member. Eligibility to live in affordable housing can be a function of limited household income and resident age. The provided ITE Parking Generation data chart shows Affordable Housing – Senior developments located in a General Urban/Suburban setting have an average parking rate range from 0.34 to 0.88 spaces per unit. Based on this data, the analysis demonstrates that an 86-unit development would require approximately 0.44 parking spaces per unit (37 total spaces).

Applying the same range to the proposed 102-unit development requires a minimum of 34 parking spaces and a maximum of 89 parking spaces. The summary analysis provided identifies the affordable housing project at the 85th percentile rate (0.80 spaces per unit), which has a peak parking demand of approximately 81.6 spaces. The applicant proposes 106 parking spaces, which exceeds the ITE parking demand for the proposed use by approximately 17 spaces.

A historical parking needs analysis was also conducted using data from 13 senior housing developments previously developed by the applicant. The average number of adults per unit and vehicles per adult were calculated and then applied to the proposed unit count to estimate parking demand. This analysis demonstrated that their existing affordable senior housing typically requires fewer parking spaces than the 1.5 spaces per unit currently required by the Code of Ordinances.

#### Applicability of Sec. 122-1016. - Parking studies:

(a) In the event that an applicant feels that the parking requirements of this article are inappropriate as applied to the applicant's property, the applicant may submit a parking study that addresses parking needs and demands, prepared by a professional engineer, architect or American Institute of Certified Planners-certified planner, that proposes alternate parking requirements based upon the unique characteristics of the applicant's property.

Staff Response: Applicable; due to the unique nature of the proposed use, a parking study was prepared by Hamilton Engineering and submitted by the applicant.

(b) The parking study shall consider and discuss all relevant factors including, without limitation: type of use, surrounding available public/private off-street parking, shared parking opportunities between users, hours of operation of proposed and neighboring uses, surrounding on-street parking, loading needs and demands and parking trends for similar development size and use. Additionally, estimates of parking needs and demands shall be based on recommendations in studies such as those from the Urban Land Institute (ULI), the Institute of Traffic Engineers (ITE), or the Traffic Institute, or industry standards based on data collected from geographic areas and uses or combinations of uses which are the same or comparable to the proposed area and use.

Staff Response: Applicable; the study provided the proposed use of the site as an agerestricted senior living facility. Additional relevant factors were not accounted for in the study as the ITE Parking Generation Manual indicates the use requires 34 to 89 parking spaces to sufficiently meet the needs of the proposed use. The proposed project exceeds the recommended parking spaces of ITE by 24 spaces of the maximum recommended parking.

### **Staff Recommendation: Approval with Conditions**

1. The parking analysis was based on Land Use Code 223 – Affordable Housing (Senior) for 102 units. Should the proposed use change, a new parking study will be required.



October 13, 2025

City of Ocala Growth Management Department 201 SE 3rd Street, 2nd floor, Ocala, FL 34471

RE: Madison Oaks East – Parking Waiver Request

To Whom it May Concern,

The information in this letter is being provided as support for the applicant's parking waiver request for Madison Oaks East.

#### Request:

The applicant is proposing to develop 102 units of affordable senior housing with 106 parking spaces. The applicant requests the city approve a waiver to reduce the parking space requirement for 102 affordable senior housing units from 153 parking spaces to 106 parking spaces.

Attached with this letter is ITE's Parking Generation Table, ITE Trip Generation Table and the applicant's Historical Parking Needs Analysis.

<u>Trip Parking Table</u> – ITE Parking Generation Manual,  $6^{th}$  Edition identifies the average Parking Rate (number of parked vehicles) vs (number of dwelling units) for weekdays for affordable senior apartments in a general Urban/Suburban location. The data identifies the Average Rate (or number of parking spaces needed) as 0.44 spaces per unit. The  $85^{th}$  percentile rate for affordable senior apartments is 0.80, which would be 81.6 parking spaces for 102 units. Based off of this information, the proposed development would more than likely need a total of 102 Units x 0.44 = 44.8 parking spaces or a more conservative approach, 102 Units x 0.80 = 81.6 parking spaces

<u>Trip Generation Table</u> – ITE Trip Generation Manual, 11<sup>th</sup> Edition Identifies the peak hour and total trips for affordable senior housing. The data shows the proposed development's trip generation for affordable senior housing potential is well below the typical multifamily housing and even market rate senior housing thresholds.

<u>Historical Parking Needs Analysis</u> - Data collected from the developer's previously built and currently managed developments. There are 13 senior housing developments included in the analysis. The data from each is averaged, then the average adults per unit and cars per adult are multiplied times the number of units for the proposed development. The data demonstrates that affordable senior housing requires fewer parking spaces than the 1.5 spaces per unit currently required by the City of Ocala.

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#### **Summary and Conclusion:**

Currently, the City of Ocala does not have a separate parking space requirement for affordable senior or even market rate senior housing. Senior housing requires far less parking spaces than traditional market rate apartments; affordable senior housing requires far less parking spaces than market rate senior apartments.

The City of Ocala's existing parking required for Multifamily is 1.5 spaces x 102 Units = 153 Spaces.

Based on the ITE's included data, the proposed development's trip generation for affordable senior housing potential is well below the typical multifamily housing and even market rate senior housing thresholds. ITE's parking data would require 45 to 82 parking spaces for the proposed 102-unit development.

The applicant has developed over 3,000 affordable housing units, of which more than 1,200 units are for affordable seniors. The historical parking needs data used from the existing senior housing built by the applicant demonstrates that for the proposed 102 Units, approximately 79 parking spaces would be needed for the residents.

Madison Oaks East is proposing to build 106 Spaces, which far exceeds the required number of spaces identified in the ITE data and historical parking needs provided by the applicant.

Applicant:

Madison Oaks East, LLC

558 W New England Ave., Suite 230

Winter Park, FL 3278

Contact: Stacy Banach

407-758-4866

sbanach@newsouth.cc

Engineer:

Hamilton Engineering & Surveying, LLC

3409 W. Lemon Street, Tampa, FL 33609

Lucas Carlo, P.E.

c 813-601-1849 | o 813-250-3535 Ext. 109

lucasc@hamiltonengineering.us

License No.: 61636

If you have any questions or concerns regarding the information included with this letter, please do not hesitate to contact me.

Sincerely,

HAMILTON ENGINEERING & SURVEYING, INC.

Lucas Carlo, P.E. Sr. Vice President 813.250.3535 ext 109

<u>lucasc@hamiltonengineering.us</u>



#### Trip Generation -Madison Oaks East, 9/25/25

A trip generation analysis was conducted using trip generation rates and equations from ITE's *Trip Generation Manual*, 11<sup>th</sup> Edition. Based on Land Use Code 252 (Affordable Housing), using the senior - based sub-category, the proposed development is projected to generate 134 total daily trips, 20 total AM peak-hour trips (11 in, 9 out) and 10 total PM peak-hour trips (6 in, 4 out).

### **Trip Generation Summary for Madison Oaks East**

	ITE I am al	ITE Land		Daily			
Land Use	ITE Land Use Code	Intensity		Total Trip	s		
	use Code		In	Out	Total		
Affordable Housing (Senior)	223	102 DU	67	67	134		

<sup>\*</sup> Weekday trip rates not provided for LUC 252. Based on LUC 220, the weekday trip rate is 6.74 and PM trip rate is 0.51. Thus, weekday trips calculated based on 10 PM trips / (0.51/6.74) = 134 daily trips.

	ITE Lamed		А٨	1 Peak H	our
Land Use	ITE Land Use Code	Intensity	,	5	
	ose Code		ln	Out	Total
Affordable Housing (Senior)	223	102 DU	11	9	20

	ITE Land		P۸	1 Peak Ho	our
Land Use	ITE Land Use Code	Intensity		Total Trip	5
	ose Code		ln	Out	Total
Affordable Housing (Senior)	223	102 DU	6	4	10

Based on the trip generation analysis above, the proposed development's trip generation potential is well below these typical multifamily and even market rate senior housing thresholds.

THIS DOCU ON THE DA PRINTED O THE SIGNA

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

Lucas Carlo, P.E. 3409 W. Lemon Street, Tampa, FL 33609 c 813-601-1849 | o 813-250-3535 Ext. 109 lucasc@hamiltonengineering.us | www.hamiltonengineering.us

# MADISON OAKS EAST OCALA, FL

## **PARKING NEEDS ANALYSIS**

Based on Existing Comparable Developments
Worst Case Analysis

**Estimate** (Worst Case - Uses greatest value in prior developments)

## Madison Oaks East, Ocala, FL

102 Units

	Total	Occupied			Percent	Per Occupied Unit		
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars	
1 BR Units	55	55	66.5	35.3	100.0%	1.21	0.64	
2 BR Units	47	47	88.8	43.6	100.0%	1.89	0.93	
Total	102	102	155.3	78.9	100.0%			
Average						1.52	0.77	

PROPOSED PARKING	Cars	Percent
Used by Residents	79	74.5%
Used by Management Staff	2	1.9%
Available for Visitors	25	23.6% 31.6% of resident parking
Total Proposed Parking Spaces	106	100.0%

Note: The numbers of cars per unit are based on 100% occupied units, whereas, the data is based the numbers of cars per occupied units assuring that the estimate includes the total

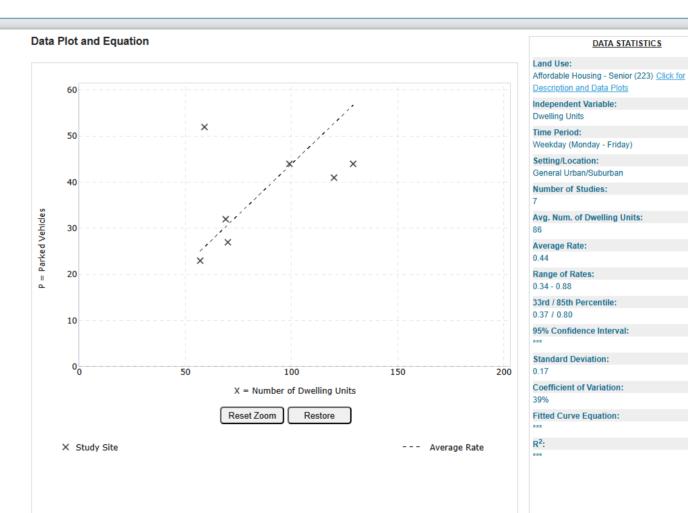
Total Projects Included: 13 Total Units Included: 1,252





# Graph Look Up

Query Filter	
Query . mer	
DATA SOURCE:	
Parking Generation Manual, 6th Ed	~
SEARCH BY LAND USE CODE:	
223	
LAND USE GROUP:	
(200-299) Residential	~
LAND USE:	
223 - Affordable Housing	~
LAND USE SUBCATEGORY:	
Senior	
SETTING/LOCATION:	
General Urban/Suburban	~
INDEPENDENT VARIABLE (IV):	
Dwelling Units	
TIME PERIOD:	
Weekday (Monday - Friday)	~]
ENTER IV VALUE TO CALCULATE PARKING DE	MAND:
Calculate	



Use the mouse wheel to Zoom Out or Zoom In. Hover the mouse pointer on data points to view X and P values.

1. Madison Grove	ıd, FL	Same Unit Types &	& Amenities as	Madison Oaks East)			
	Total		Occupied		Percent	Per Occ	upied Unit
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars
1 BR Units	53	53	59	34	100.0%	1.11	0.64
2 BR Units	27	27	51	23	100.0%	1.89	0.85
Total	80	80	110	57	100.0%		
Average						1.38	0.71

2. Madison Land	ing II, Orl	ando, F	L (S	Same Unit	Types & Amenities	s as Madison Oa	aks Eastw/ 96 Units)
	Total	Occupied			Percent	Per Occupied Unit	
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars
1 BR Units	48	48	50	23	100.0%	1.04	0.48
2 BR Units	48	48	71	39	100.0%	1.48	0.81
Total	96	96	121	62	100.0%		
Average						1.26	0.65

3. Madison Land	(Sa	(Same Unit Types & Amenities as Madison Oaks East w/ 110 Units)					
	Total	Occupied			Percent	Per Occupied Unit	
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars
1 BR Units	55	55	58	32	100.0%	1.05	0.58
2 BR Units	55	55	81	43	100.0%	1.47	0.78
Total	110	110	139	75	100.0%		
Average						1.26	0.68

4. Madison Highlands, Tampa, FL				me Unit Ty	pes & Amenities	as Madison Oak	s East w/ 102 Units)
	Total	Occupied			Percent	Per Occ	upied Unit
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars
1 BR Units	51	51	57	20	100.0%	1.12	0.39
2 BR Units	51	51	61	30	100.0%	1.20	0.59
Total	102	102	118	50	100.0%		
Average						1.16	0.49

5. Madison Point	(Same Unit Types & Amenities as Madison Oaks East w/ 80 Units)						
	Total	Occupied			Percent	Per Occupied Unit	
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars
1 BR Units	40	40	44	23	100.0%	1.10	0.58
2 BR Units	40	40	52	35	100.0%	1.30	0.88
Total	80	80	96	58	100.0%		
Average						1.20	0.73

6. Madison Crossing, Kissimmee, FL (Same Unit Types & Amenities as Madison Oaks East w/ 86								
	Total		Occupied		Percent	Per Occupied Unit		
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars	
1 BR Units	44	44	49	23	100.0%	1.11	0.52	
2 BR Units	44	44	69	28	100.0%	1.57	0.64	
Total	88	88	118	51	100.0%			
Average						1.34	0.58	

7. Madison Crossing II, Kissimmee, FL (Same Unit Types & Amenities as Madison Oaks East w/ 86 Units)								
	Total		Occupied		Percent	Per Occupied Unit		
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars	
1 BR Units	43	43	52	22	100.0%	1.21	0.51	
2 BR Units	43	43	64	23	100.0%	1.49	0.53	
Total	86	86	116	45	100.0%			
Average						1.35	0.52	

8. Madison Heigh	a, FL	(Same Unit Types & Amenities as Madison Oaks East w/ 80 Units)					
	Total		Occupied		Percent	Per Occupied Unit	
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars
1 BR Units	40	40	46	10	100.0%	1.15	0.25
2 BR Units	40	40	60	20	100.0%	1.50	0.50
Total	80	80	106	30	100.0%		
Average						1.33	0.38

9. Madison Reserve, Spring Hill, FL (Same Unit Types & Amenities as Madison Oaks East w/ 90 Units)								
	Total	Occupied		Percent	Per Occupied Unit			
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars	
1 BR Units	46	46	48	26	100.0%	1.04	0.57	
2 BR Units	44	44	55	37	100.0%	1.25	0.84	
Total	90	90	103	63	100.0%			
Average						1.14	0.70	

10. Madison Glen, Ormond Beach, FL (Same Unit Types & Amenities as Madison Oaks East w/ 96 Units)									
	Total		Occupied		Percent	Per Occupied Unit			
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars		
1 BR Units	49	48	50	26	98.0%	1.04	0.54		
2 BR Units	37	34	41	24	91.9%	1.21	0.71		
3 BR Units	10	8	9	7	80.0%	1.13	0.88		
Total	96	90	100	57	93.8%				
Average						1.11	0.63		

11. Madison Vine	s, Fort Pi	ierce, F	L (S	(Same Unit Types & Amenities as Madison Oaks East w/ 92 Units				
	Total		Occupied		Percent	Per Occ	upied Unit	
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars	
1 BR Units	46	45	45	27	97.8%	1.00	0.60	
2 BR Units	36	34	40	25	94.4%	1.18	0.74	
3 BR Units	10	10	19	9	100.0%	1.90	0.90	
Total	92	89	104	61	96.7%			
Average						1.17	0.69	

12. Madison Manor, Jacksonville, FL (Same Unit Types & Amenities as Madison Oaks East w/ 160 Units)								
	Total		Occupied		Percent	Per Occupied Unit		
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars	
1 BR Units	80	79	82	50	98.8%	1.04	0.63	
2 BR Units	56	55	65	51	98.2%	1.18	0.93	
3 BR Units	24	23	28	24	95.8%	1.22	1.04	
Total	160	157	175	125	98.1%			
Average						1.11	0.80	

13. Lansdowne	(Sa	(Same Unit Types & Amenities as Madison Oaks East w/ 160 Units)					
	Total		Occupied		Percent	Per Occ	upied Unit
Unit Type	Quantity	Units	Adults	Cars	Occupied	Adults	Cars
1 BR Units	81	78	83	43	96.3%	1.06	0.55
2 BR Units	55	55	66	32	100.0%	1.20	0.58
3 BR Units	24	21	31	16	87.5%	1.48	0.76
Total	160	154	180	91	96.3%		
Average						1.17	0.59

# P&Z Meeting: 11/10/2025

**AERIAL MAP** 

PS25-0001 Case Number:

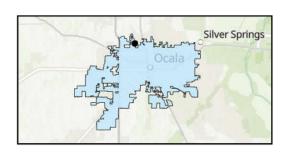
Parcel: 21385-002-00

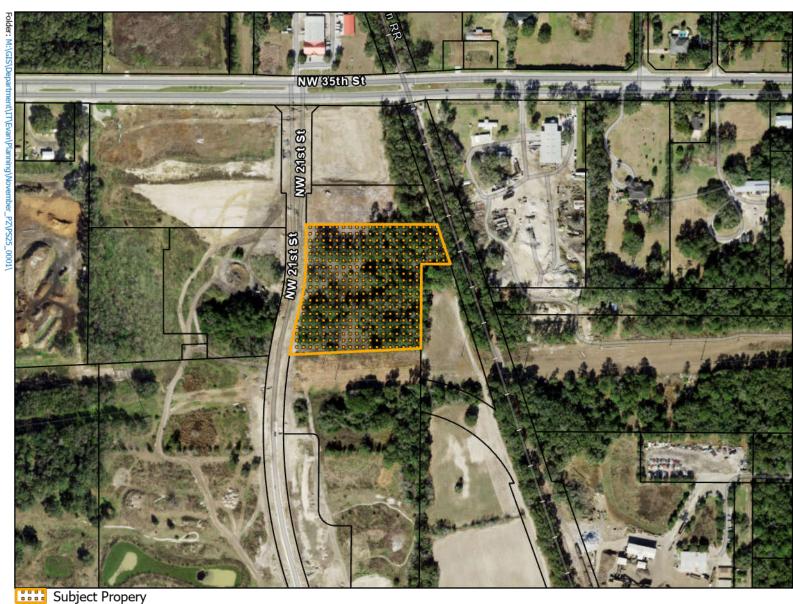
Approximately 5.86 Acres **Property Size:** 

Land Use Designation: Medium Intensity/Special District

PD, Planned Development Zoning:

Proposal: A request to reduce parking in excess of 10%.





**Parcels** 

425 850 1,700 Feet



# P&Z Meeting: 11/10/2025

**CASE MAP** 

Case Number: PS25-0001

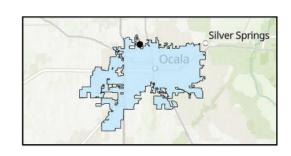
Parcel: 21385-002-00

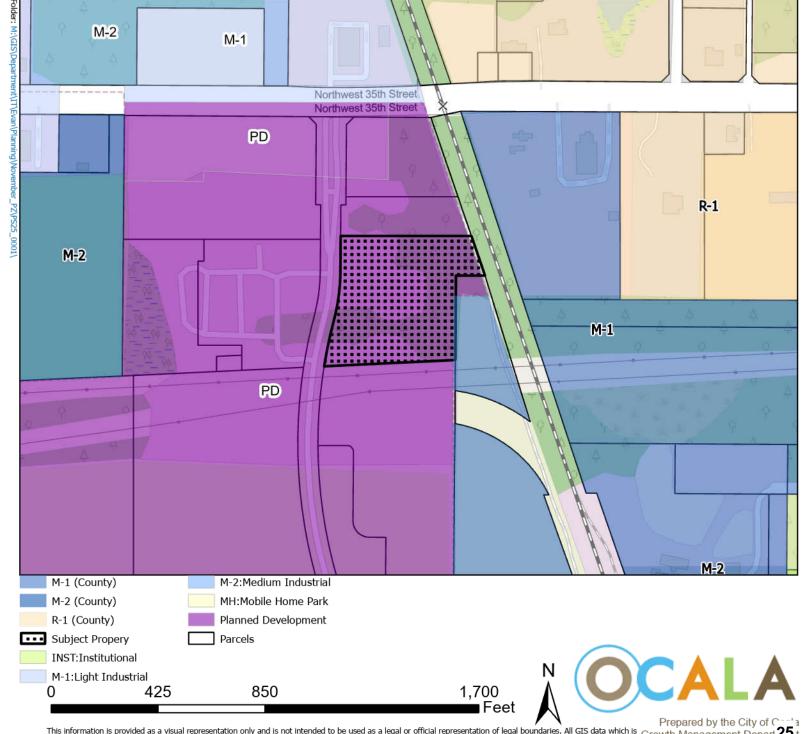
Property Size: Approximately 5.86 Acres

Land Use Designation: Medium Intensity/Special District

**Zoning**: PD, Planned Development

**Proposal:** A request to reduce parking in excess of 10%.







# Ocala

110 SE Watula Avenue Ocala, FL 34471

# Legislation Text

www.ocalafl.gov

**File #:** 2026-0192 Agenda Item #: a.

Submitted By: Emily Johnson

Presentation By: Emily Johnson

Department: Growth Management

# STAFF RECOMMENDATION (Motion Ready):

Ordinance to rezone approximately 3.57 acres for a portion of the property located at 2336 NW 7th Street (Parcel 22682-000-00) from M-1, Light Industrial, to M-2, Medium Industrial (Case ZON25-0014) (Quasi-Judicial)

#### OCALA'S RELEVANT STRATEGIC GOALS:

Quality of Place.

#### **PROOF OF PUBLICATION:**

N/A

#### **BACKGROUND:**

- Applicant: Mickey Truck Bodies, Inc
- Property Owner: Marilyn O. Laye, Trustee, Marilyn O Laye Revocable Living Trust
- Agent: Fred N. Roberts, Jr., Esq., Klein & Klein PLLC

#### **Key Points:**

The petitioner is requesting to rezone a 3.57-acre property from M-1, Light Industrial, to M-2, Medium Industrial. The applicant owns the adjoining M-2-zoned property to the west (Parcels 2268-003-015 and 2268-003-016) and is in the process of acquiring the subject property from the current owner. The applicant intends to utilize the site for additional outdoor storage to support their existing repair garage.

The subject property is developed with four non-conforming single-family residences. GIS Aerial imagery indicates that a portion of the subject property has historically been used as outdoor storage dating back to the early 2000s.

The requested rezoning would become effective upon transfer of the subject property to the applicant.

## Zoning and Land Use Details:

For consideration of the rezoning, there are several key factors to consider:

- The four single-family residences are considered non-conforming. If any of the residences remain vacant for a period of more than one year, the non-conforming status for each residential use would be discontinued.
- The Employment Center Future Land Use (FLU) only permits residential development as part of an approved Planned Development (PD) district.
- The adjacent properties to the south and west are zoned M-2.
- The M-2 zoning district allows for unlimited accessory outdoor storage.
- The M-2 zoning district only permits outdoor manufacturing by special exception.

## FINDINGS AND CONCLUSIONS:

- The proposed rezoning is consistent with the requested Employment Center Future Land Use classification, pursuant to Section 122-244 of the Code of Ordinances.,
- There are no additional nonconformities created and there is no expansion to existing non-conformities as a result of the proposed amendment.
- The M-2, Light Industrial, zoning district is compatible with the surrounding area. Adjacent properties to the south and west have existing M-2 zoning.
- The requested rezoning would become effective upon transfer of the subject property to the applicant.
- City utilities are available at this location, and no level of service issues has been identified for public facilities as a result of the zoning amendment.
- The proposed zoning amendment is consistent with the comprehensive plan and land development regulations.

Staff recommends approval.

#### **FISCAL IMPACT:**

N/A

#### **PROCUREMENT REVIEW:**

N/A

#### **LEGAL REVIEW:**

The ordinance is pending review by the City Attorney, William E. Sexton.

#### **ALTERNATIVE:**

- Approve with changes.
- Deny
- Table

#### **SUPPORT MATERIALS:**

- Staff Report
- Case Map
- Aerial Map

# **ORDINANCE 2026-XX**

AN ORDINANCE AMENDING THE ZONING MAP OF THE CITY OF OCALA, FLORIDA, CHANGING THE ZONING FROM M-1, LIGHT INDUSTRIAL, TO M-2, MEDIUM INDUSTRUAL, FOR CERTAIN PROPERTY LOCATED AT 2306 NW 7TH STREET (A PORTION OF PARCEL 22682-000-00), APPROXIMATELY 3.57 ACRES (CASE NO. ZON25-0014); PROVIDING DIRECTION TO STAFF; REPEALING INCONSISTENT AND/OR CONFLICTING PROVISIONS; PROVIDING FOR SEVERABILITY OF ORDINANCE PROVISIONS; PROVIDING FOR MODIFICATIONS ARISING FROM CONSIDERATIONS AT A PUBLIC HEARING; PROVIDING DIRECTION TO THE CODIFIER; AND PROVIDING FOR AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF OCALA, FLORIDA, in regular session, as follows:

Section 1. The lands described below are hereby rezoned and reclassified according to the zoning regulation of the City of Ocala, Florida, as M-2, Medium Industrial:

COMMENCE AT THE NORTH 1/4 CORNER OF SECTION 13, TOWNSHIP 15 SOUTH, RANGE 21 EAST, MARION COUNTY, FLORIDA; THENCE NORTH 89 DEGREES 28 MINUTES 45 SECONDS WEST 661.06 FEET TO THE NORTHEAST CORNER OF THE EAST 1/2 OF THE NW 1/4 OF THE NE 1/4 OF THE NW 1/4 OF SAID SECTION 13, SAID POINT MONUMENTED BY A NAIL AND DISK IN ASPHALT (ID#4883); THENCE SOUTH 00 DEGREES 25' 10" EAST 189.92 FEET FOR THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 00 DEGREES 25' 10" EAST, 472.00 FEET TO THE SOUTHEAST CORNER OF SAID EAST 1/2 OF THE NW 1/4 OF THE NE 1/4 OF THE NW 1/4 OF SECTION 13; THENCE NORTH 89 DEGREES 26 MINUTES 06 SECONDS, 330.66 FEET TO THE SOUTHWEST CORNER OF SAID EAST 1/2 AS MONUMENTED BY A %" REBAR WITH CAP (ID #7872); THENCE NORTH 00 DEGREES 26 MINUTES 05 SECONDS EAST, 471.00 FEET; THENCE SOUTH 89 DEGREES 36 MINUTES 30 SECONDS EAST, 330.53 FEET TO THE POINT OF BEGINNING.

PARCEL DESCRIBED CONTAINES 3.57 ACRES, MORE OR LESS.

Section 2. Direction to Staff. The City Council of the City of Ocala, Florida directs staff to take any and all steps necessary to effectuate the adoption and implementation of this ordinance; and all other matters as provided for above and herein as well as to ensure the orderly and effective administration and implementation of the intent of this ordinance and the specific matters outlined herein.

<u>Section 3.</u> Repealing Inconsistent and/or Conflicting Provisions. The City Council of the City of Ocala, Florida hereby specifically repeals, to the extent of any such conflict, any and all ordinances, resolutions,

policies, procedures, and/or other articles which are conflicting and/or inconsistent with this ordinance and the intent and direction provided by the City Council herein.

Section 4. Severability of Ordinance Provisions. If any section, phrase, sentence or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, it is the intent of the City Council of the City of Ocala, Florida that (1) such portion shall be deemed a separate, distinct and independent provision; (2) such holding shall not affect the validity of the remaining portions hereof; and (3) this ordinance be adopted as though any such provision was not included herein.

Section 5. Modifications Arising from Consideration at a Public Hearing. It is the intention of the City Council of the City of Ocala, Florida that (1) the provisions of this ordinance may be modified as a result of its consideration by the City Council of matters that may arise during the public hearing(s) at which this ordinance is considered; and (2) any such modifications shall be incorporated into the final version of this ordinance.

Section 6. Direction to the Codifier. It is the intention of the City Council of the City of Ocala, Florida that (1) the zoning map of the City of Ocala is hereby amended to reflect the change in zoning classification from M-1, Light Industrial, to M-2, Medium Industrial, as to lands described in Section 1 of this ordinance; (2) the sections and paragraphs of this ordinance may be renumbered or relettered in order to accomplish said intention; (3) terms or headings not affecting the intent of this ordinance may be changed to further accomplish said intention; and (4) any scrivener's error(s) contained herein which do not affect the intent of this ordinance be corrected with the authorization of the City Manager or their designee and without the need for additional public hearings or consideration by City Council.

Section 7. This ordinance shall become effective upon:

- (1) The approval of a lot reconfiguration and conveyance of the property described in Section 1 to Mickey Truck Bodies, Inc. with the combination of such property to the adjacent parcel identified under Marion County Parcel Identification Number 2268-003-015 also owned by Mickey Truck Bodies, Inc. If this item 1 is not satisfied within six (6) months from the date of adoption hereof, the ordinance shall automatically be deemed null and void without further action required by the City Council of the City of Ocala, Florida; and
- (2) Approval by the mayor, or upon becoming law without such approval.

ATTEST:	CITY OF OCALA	
By:	By:	
Angel B. Jacobs	Kristen M. Dreyer	
City Clerk	President, Ocala City Council	
Approved/Denied by me as Mayor of the Ci	ty of Ocala, Florida, on	, 2025.
	Ву:	
	Ben Marciano	
	Mayor	
Approved as to form and legality:		
By:	_	
William E. Sexton		

# City Attorney

Ordinance No: 2026-XX

Introduced: Click or tap to enter a date.

Adopted: Click or tap to enter a date.

Legal Ad No: Click or tap here to enter text.

# Rezoning Staff Report

Case No. ZON25-0014

Planning & Zoning Commission: November 10, 2025 City Council (1<sup>st</sup> Reading): December 16, 2025 City Council (Adoption): January 6, 2026



**Applicant:** Mickey Truck Bodies, Inc.

**Property Owner:** Marilyn O. Laye, Trustee, The Marilyn O. Laye Revocable

**Living Trust** 

**Project Planner:** Emily W. Johnson, AICP, Senior Planner

**Amendment Request:** Seeking approval to rezone a 3.57-acre portion of the subject

property from M-1, Light Industrial, to M-2, Medium Industrial

**Parcel Information** 

Acres:  $\pm 5.06$  acres Rezoning Area:  $\pm 3.57$  acres

Parcel(s)#: 22682-000-00

Location: 2336 NW 7th Street

Existing use: Four existing non-conforming single-family residences,

accessory barn, outdoor storage

Future Land Use Designation: Employment Center

Zoning Designation: M-1, Light Industrial

Special District(s)/Plan(s): N/A
Approved Agreement(s): N/A

Figure 1. Aerial Location Map



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# **Section 1 - Applicant Request**

The applicant is requesting to rezone 3.57-acre rear portion of the subject property from M-1, Light Industrial, to M-2, Medium Industrial. The applicant owns the adjoining M-2-zoned property to the west and is in the process of acquiring the 3.57-acre area from the current property owner. The applicant has indicated their intent to utilize the site for additional outdoor storage in support of their existing repair garage. The applicant is further requesting that rezoning only becomes effective upon transfer of the subject property to the applicant.

The agent, Fred N. Roberts, Jr., Esq., Klein & Klein PLLC, is representing the applicant in this request.

# **Section 2 - Background Information**

The property in its entirety encompasses a total of approximately 5.06 acres. The current designations are:

**Zoning:** 

**M-1, Light Industrial** district is intended primarily for wholesale distribution, warehouse storage, research and development, showroom sales, and light manufacturing of finished or semi-finished products. The light industrial uses shall be compatible with the surrounding uses. Outdoor manufacturing is not allowed in the M-1 district. Outdoor storage is allowed as a permitted accessory use, if it complies with design criteria in section 122-763. Specific uses shall be controlled by the standards for industrial performance in article VIII of this chapter.

**Future Land Use:** 

**Employment Center**, a maximum of 24 dwelling units per acre in association with a Planned Development (PD) zoning district, a maximum of 2.0 floor area ratio (FAR).

The subject property was originally developed in the county with a single-family residence in 1940, with two additional residences constructed in 1968, and a fourth constructed in 1970. All four residences are currently occupied and considered nonconforming uses within an M-1 zoning district.

Annexation records indicate that the subject property was incorporated into city limits in 1975 and zoned M-1, Light Industrial. In 1991, the property was designated through the Comprehensive Plan with Light Industrial future land use. On January 22, 2013, the City Council adopted Comprehensive Plan Amendments consistent with the Ocala 2035 Vision, which eliminated the Light Industrial Future Land Use Classifications while designating a new classification of Employment Center to the subject property. The intent of the Employment Center Future Land Use Category (FLUC) is to provide a regionally important hub for business, enterprise, research and development, and employment activities.

Pursuant to Division 25, Article V, Chapter 122 of the Code of Ordinances, residential uses are not permitted in the M-1 zoning district, thus the four existing single-family residences are considered non-conforming.

GIS Aerial imagery indicates that a portion of the subject property has historically been used as outdoor storage dating back to the early 2000s. Outdoor storage is a permitted accessory use within the M-1 zoning district, subject to additional criteria contained under Section 122-763.

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**Table 1: Adjacent Property Information:** 

Direction	Future Land Use	Zoning District	Current Use
North	Neighborhood	R-2, Two-Family Residential	Single-family residences adjacent to NW 7 <sup>th</sup> Street
East	Employment Center	M-1, Light Industrial	Vacant, undeveloped
South	Employment Center	M-1, Light Industrial M-2, Medium Industrial	CSX Railroad Right-of-Way Outdoor storage associated with Trademark Metals Recycling
West	Employment Center	M-1, Light Industrial M-2, Medium Industrial	Repair Garage (Mickey Truck Bodies) Recycling Center (Trademark Metals Recycling)

The applicant owns the western-adjacent property, which is zoned M-2 and developed with a Repair Garage. The applicant intends to purchase the 3.57-acre subject property and incorporate it into their parcel through a Lot Reconfiguration process.

The subject property is accessed by NW 7<sup>th</sup> Street, an unclassified roadway connecting NW 27<sup>th</sup> Avenue and NW Old Blitchton Road. A CSX railroad right-of-way borders the subject property to the south, providing rail access to the Shady Road Industrial Park located to the west. M-1 and M-2 zoned properties surround the subject property to the south, west, and east.

# Section 3 – Staff Analysis

The northern 1.49-acres, developed with four single-family residences, is proposed to remain zoned M-1 as a buffer to the R-2, Two-Family Residential, zoning located across NW 7<sup>th</sup> Street. Pursuant to Division 25, Article V, Chapter 122 of the Code of Ordinances, residential uses are not permitted in the M-1 zoning district. Due to the status of the four existing single-family residences as non-conforming, the use may be continued subject to the following provisions under Section 122-173:

- (1) No such nonconforming use shall be enlarged or increased, or extended, or occupy a greater area of land than was occupied at the effective date of the ordinance from which this chapter is derived, before the date of adoption of this chapter, or the effective date of an amendment of this chapter. Staff review of the nonconforming use determined that the existing nonconformity is not enlarged or increased, extended, or occupies a greater area of land with the amendment. No additional changes are anticipated through this request. Additional residential units are not allowed under the requested M-2 zoning district.
- (2) No such nonconforming use shall be moved in whole or in part to any other portion of the lot or parcel occupied by such use at the effective date of the ordinance from which this chapter is derived, before the date of adoption of this chapter, or the effective date of an amendment of

- this chapter. The residential use is not proposed to be relocated or moved to any other portion of the lot.
- (3) If any such nonconforming use of land ceases for any reason for a period of more than one year, any subsequent use of such land shall conform to the regulations specified by this chapter for the district in which such land is located. Evidence has been provided to staff that indicates the residential units continue to be occupied.

The applicant has submitted the requested amendment as part of a private property sale. Ultimately, the applicant intends to split the southern 3.57-acre portion from the subject property and combine it with their adjoining M-2 zoned parcel. Although a lot split and resulting reduction of the property area to approximately 1.49 acres increases the density per acre, changes in density is not indicated in Section 122-173 as a change to the non-conforming use that would require the use to come into compliance with the zoning district. Additionally, if any of the residences remain vacant for a period of more than one year, the continuation of the non-conforming status will be null and void.

It is noted that the adjacent industrial developments to the west and south have M-2 zoning. Pursuant to Section 122-781, this zoning district is intended primarily for wholesale distribution, warehouse storage, outdoor storage and sales, research and development and light manufacturing of finished or semi-finished products in multiple-use facilities or structures. Outdoor manufacturing is only permitted with a special exception in the M-2 zoning district.

# **Consistency with Comprehensive Plan:**

The requested rezoning is consistent with the following Objectives and Policies of the City of Ocala Future Land Use Element:

1. Future Land Use Element Policy 6.5: Employment Center. The intent of the Employment Center land use is to provide a regionally-important hub for business, enterprise, research and development, and employment activities. Employment Centers are generally single use districts, but may include more than one (1) use if there are appropriate buffers and transitions between complementary uses. Permitted uses shall include a primary use and may include a secondary use. Primary uses are industrial, office and commercial. Secondary uses are public, recreation, institutional, and residential, as well as educational facilities. There are no form requirements in this land use category.

Access is primarily from major collectors, arterials, or limited-access highways. The primary modes of transportation include automobiles, trucks, freight rail, bus, and commuter rail transit. Provisions should be made for walking, bicycles, and transit.

There is no minimum density and intensity in this future land use category. The maximum density and intensity before any incentives is 24 dwelling units per gross acre or 2.00 FAR. The location and application of incentives shall be set forth in the Land Development Code.

#### Staff Comment:

- The proposed M-2 zoning district is consistent with the existing Employment Center Future Land Use category allows for industrial uses.
- The existing non-conforming single-family residences are not compatible with the Employment Center Future Land Use category.
- The maximum density and intensity of the Employment Center FLU is 24 dwelling units per acre. Any residential development in this FLU requires a rezoning to a mixed-use

## Planned Development (PD) zoning district.

2. <u>Future Land Use Element Objective 14</u>: The City shall continue existing regulations or adopt new regulations to ensure that development is consistent with the Future Land Use Map and are compatible with neighboring development, available services and facilities, and topography and soil conditions.

## Staff Comment:

• The requested rezoning aligns with development in the surrounding and adjacent areas which currently have Employment Center FLU and are zoned M-1 and M-2.

# **Consistency with Land Development Regulations:**

The requested rezoning is consistent with the following Sections of the City of Ocala Code of Ordinances:

1. <u>Section 122-244</u> - *District criteria*: Zoning districts allowed under each land use classification.

<b>Employment Center</b>	O-1, OP, B-1, B-1A, B-2, B-2A, B-4, B-5, SC, M-1, <b>M-2</b> , M-
	3, G-U, INST, A-1, PD, FBC

Staff Comment:

The requested M-2 zoning district is consistent with the existing Employment Center FLU designation.

**Table 2: Existing and Proposed Zoning District Standards** 

	Zoning District	Intent and Purpose	Minimum Lot Area (square feet)	Maximum Building Height (feet)
Existing	M-1, Light Industrial	Intended primarily for wholesale distribution, warehouse storage, research and development, showroom sales, and light manufacturing of finished or semi-finished products.	10,000	60-feet
Proposed	M-2, Medium Industrial	Intended primarily for the wholesale distribution, warehouse storage, outdoor storage and sales, research and development and light manufacturing of finished or semifinished products in multiple-use facilities or structures.	20,000	60-feet

#### Staff Comment:

The subject 3.57-acre portion of property meets the minimum lot area required for development within the M-2 zoning district.

# Section 5 - Level of Service (LOS) Analysis

The maximum allowable density for the subject property with the requested Employment Center land use is 121 dwelling units, with a maximum FAR of 440,827.2 square feet. In staff's review of rezoning petitions, conducting an analysis of LOS impact based upon maximum potential buildout (density/intensity) is not realistic. Additionally, further detailed LOS impact analysis will be required to address the specific proposed development as part of subsequent application review.

For this staff report, the following LOS analysis is only intended to provide the current conditions of public facilities with a limited review of the <u>potential</u> impact on public facilities based upon a typical light manufacturing/distribution type use that is consistent with the concurrent request of M-2, Medium Industrial. Additional LOS analysis will be required at the time of expansion of the uses, or future redevelopment.

# A. Required Public Facilities (adopted LOS standards in the comprehensive plan):

<u>Transportation:</u> The subject property is accessed by NW 7<sup>th</sup> Street, an unclassified roadway connecting to NW 27<sup>th</sup> Avenue and NW Old Blitchton Road. The 2023 congestion management data from the Ocala-Marion TPO for the affected roadway(s) is provided below.

### • Adopted LOS / Available Capacity:

Road/ Street Name	Lanes	Speed Limit	Functional Classification	Adopted LOS	LOS Capacity	2023 AADT	Existing LOS
NW 27 <sup>th</sup> Avenue	4	45	Arterial	E	35,820	27,200	С

Developments proposing to generate 100 or more net new PM peak hour trips are required to submit a traffic study as part of the subdivision review.

LOS Impact: Additional trips are not contemplated as a result of the proposed rezoning. Specific traffic analysis will be required through a traffic study prior to any expansion of the existing uses or future redevelopment.

<u>Potable Water:</u> Nearby uses are currently serviced by City of Ocala Utilities. City utilities are available at this location; connections will be determined during the site plan review process. A city water main runs along NW 7<sup>th</sup> Street.

- Adopted Level of Service (LOS) Potable Water: 300 gallons per day (gpd) per equivalent residential unit (ERU), or the equivalent of 167 gallons per capita daily (gpcd).
- Available Capacity: Capacity is available. The permitted capacity of the City's water system is 24.4 million gallons daily (mgd).

LOS Impact: Additional demand is not contemplated as a result of the proposed rezoning. Water Resources staff has indicated the approximate daily flows are 15 mgd, leaving a remaining capacity of approximately 9.4 mgd; additional capacity analysis will be required at the time of site plan review for any expansion of the existing uses or future redevelopment.

<u>Sanitary Sewer</u>: Nearby uses are currently being serviced by City of Ocala Utilities. City utilities are available at this location; connections will be determined during the site plan review process. A city gravity main is available along NW 7<sup>th</sup> Street.

- Adopted Level of Service (LOS) Sanitary Sewer: 250 gallons per day (gpd) per equivalent residential unit (ERU), or the equivalent of 80 gallons per capita daily (gpcd).
- Available Capacity: Capacity is available. The permitted capacity of Water Reclamation Facility #2 is 6.5 million gallons daily (mgd) and the permitted capacity of Water Reclamation Facility #3 is 4.0 million gallons daily (mgd).

LOS Impact: Additional demand is not contemplated as a result of the proposed rezoning. Water Resources staff has indicated the approximate daily flows are 6.6 mgd leaving a remaining capacity of approximately 3.9 mgd; additional capacity analysis will be required at the time of site plan review for any expansion of the existing uses or future redevelopment.

**Solid Waste:** The subject property is located within the City's service area; refuse pickup will be determined during the site plan review process.

• Adopted Level of Service (LOS) Solid Waste: 0.0112 pounds per square foot of occupied building space per day for nonresidential development.

LOS Impact: Solid waste is transported to facilities outside of the city, the capacity of these facilities is under others jurisdiction.

### **Parks and Recreation Facilities:**

- Adopted Level of Service (LOS) Solid Waste: 4.6 developed park acres per 1,000 population for each Regional Park Service Area (RPSA).
- Available Capacity: Capacity is available. The City's population of 69,283 requires 318.70 developed park acres. The city currently owns and maintains 622.27 developed park acres, pursuant to the Fall 2024 Activity Guide released by the Recreation and Parks Department.

LOS Impact: The anticipated industrial uses generally do not generate additional demand for parks. Additional capacity analysis will be required at the time of rezoning and site plan review, if a residential redevelopment is contemplated in the future.

### **B.** Other Public Facilities:

The following public facilities do not have adopted Level of Service standards and are provided as additional information.

**Stormwater:** The subject property is not located within a Flood Zone. Any future development must retain runoff on-site to match pre-development conditions. Facilities must be designed to provide flood protection for a 100 year, 24-hour storm event and subsequent 14-day recovery.

**Electric:** The subject properties are within the Ocala Electric Utility service territory.

**<u>Fiber:</u>** Service is not currently available at this location.

<u>Fire Service</u>: Ocala Fire Rescue Station #1 is located approximately 0.7 miles from the subject property. This distance falls within the desired industry standard of 1.5 miles for fire service.

**Schools:** The proposed amendment is not anticipated to impact schools.

Staff Comment: Preliminary review of the Required Public Facilities does not indicate any capacity issues. Further LOS analysis will be required prior to any expansion or future redevelopment as part of subsequent site plan reviews.

**Summary Staff Comments:** For consideration of the rezoning, there are several key factors to consider:

- The four existing single-family residences are considered non-conforming. If any of the residences remain vacant for a period of more than one year, the non-conforming status for such structure will be null and void.
- The adjacent properties to the south and west are zoned M-2, Medium Industrial.
- The M-2, Medium Industrial, zoning district allows for unlimited accessory outdoor storage.
- The M-2, Medium Industrial, zoning district only permits outdoor manufacturing by special exception.

### **Section 6 - Staff Findings and Recommendation**

- The proposed rezoning is consistent with the requested Employment Center Future Land Use classification, pursuant to Section 122-244 of the Code of Ordinances.,
- There are no additional nonconformities created and there is no expansion to existing nonconformities as a result of the proposed amendment.
- The M-2, Light Industrial, zoning district is compatible with the surrounding area. Adjacent properties to the south and west have existing M-2 zoning.
- The requested rezoning would become effective upon transfer of the subject property to the applicant.
- City utilities are available at this location, and no level of service issues has been identified for public facilities as a result of the zoning amendment.
- The proposed zoning amendment is consistent with the comprehensive plan and land development regulations.

Staff Recommendation: Approval of ZON25-0014

### P&Z Meeting: 11/10/2025

**CASE MAP** 

ZON25-0014 Case Number:

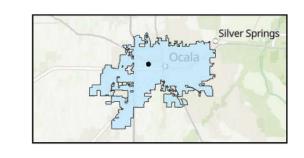
Parcel: A portion of

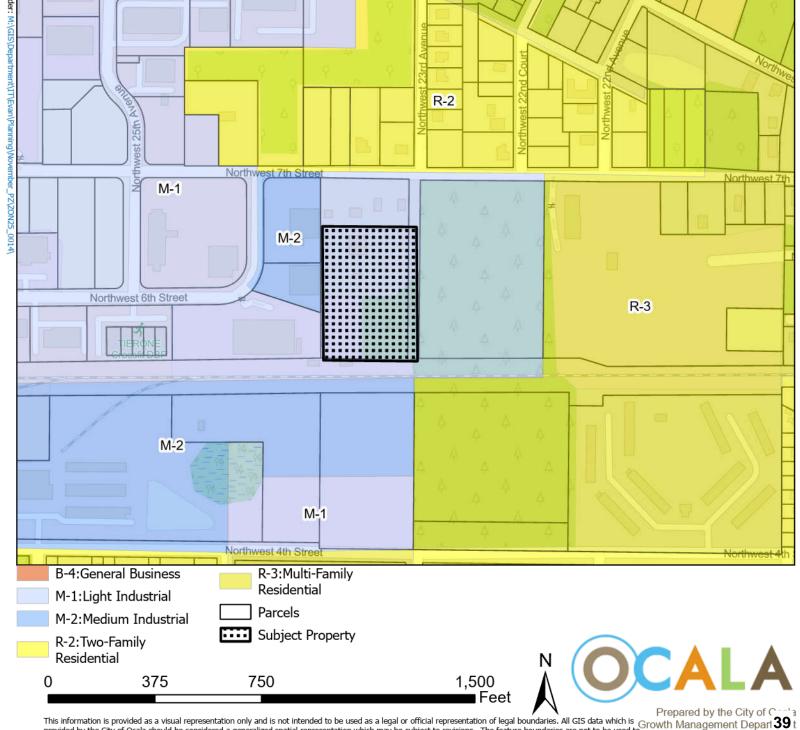
22682-000-00

**Property Size:** Approximately 3.58 Acres

Land Use Designation: **Employment Center** Zoning: M1, Light Industrial

A request to rezone from M1, light industrial to M2, Medium Industrial Proposal:





# P&Z Meeting: 11/10/2025

**AERIAL MAP** 

Case Number: ZON25-0014

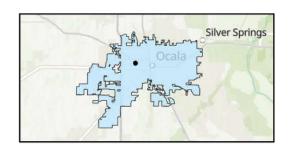
Parcel: A portion of

22682-000-00

Property Size: Approximately 3.58 Acres

**Land Use Designation:** Employment Center **Zoning:** M1, Light Industrial

**Proposal:** A request to rezone from M1, light industrial to M2, Medium Industrial





Parcels

375 750

1,500 Feet





# Ocala

110 SE Watula Avenue Ocala, FL 34471

www.ocalafl.gov

### **Legislation Text**

**File #:** 2026-0200 Agenda Item #: a.

Submitted By: Emily W. Johnson

Presentation By: Emily W. Johnson

Department: Growth Management

## **OFFICIAL TITLE** (Motion Ready):

Ordinance to amend the code of ordinances Section 122-1225 to authorize the use of above-ground air curtain burners as an ancillary use to a Materials Recovery Facility as well as establishing conditions and limitations relating to such ancillary use (COD25-0004).

### OCALA'S RELEVANT STRATEGIC GOALS:

Economic Hub, Quality of Place

### **PROOF OF PUBLICATION:**

N/A

- Applicant: Friends Recycling, LLC
- Agent: Fred N. Roberts, Jr., Esq., Klein & Klein, PLLC

### **BACKGROUND:**

The applicant owns a Construction & Demolition (C&D) landfill and Materials Recovery Facility (MRF) located at 2340 NW 27<sup>th</sup> Avenue. The applicant-initiated conversations with staff inquiring about adding an above-ground air curtain incinerator as part of their operations. Review of the existing land development regulations of the Materials Recovery Facility section by staff determined that a code amendment request to define and permit air curtain incinerators as an ancillary use would be necessary. The agent subsequently prepared an amendment to the Code of Ordinances requesting to amend the supplemental regulations for Materials Recovery Facilities (Section 122-1225).

The Ordinance proposes the following changes:

• Defines *above-ground air curtain incinerators* as a "portable or stationary device that operates by forcefully projecting a curtain of air across an open, integrated combustion chamber in which combustion occurs and which is designed to contain combustion and limit visible emissions during the combustion of permitted vegetative debris."

- Establishes limitations on the materials that may be burned in above-ground air curtain incinerators.
- Establishes a minimum setback of 200-feet from the property line of any residential zoning district, dwelling unit, church, daycare, school, hospital, or publicly accessible park, and 100 feet from all other property lines, specifies that greater setbacks may be required by the city based on site conditions or public health concerns.
- Requires site plan approval to include a defined operations delineating placement locations for the above-ground air curtain incinerator and materials storage areas.
- Limits the hours of operations for above-ground air curtain incinerators to Monday through Friday, 8:00 a.m. to one (1) hour before local sunset. Prohibits operations on weekends and city-recognized holidays, and specifies that the City Manager may upon request authorize extended hours of operation in response to natural disasters, declared emergencies, or other conditions requiring expedited debris management.
- Requires submittal and approval of a written operations plan addressing procedures for use, fire prevention and suppression, emissions control, and odor and dust mitigation.
- Prohibits ground stockpiling of ash and residue.
- Limits storage of unprocessed vegetative debris to fourteen (14) days.
- Granting the building official authority as defined in Sec. 122-2 the ability to immediately revoke any approvals or permits associated with the ancillary use.
- Requires compliance with all other federal, state, and local regulations.

An emission evaluation and data report published by the U.S. Department of Agriculture (USDA) Forest Service identifies that above-ground air curtain incinerators offer a useful alternative to current fuel reduction and disposal methods, citing conclusions that the use produces lower smoke emissions compared to pile or broadcast burning, reduces fire risk, and contains a burn area to a specific site.

Recent changes to state law, including the enactment of F.S. Chapter 2025-190 (formerly SB 180), took effect on July 1, 2025. This statute prohibits municipalities from adopting more restrictive or burdensome code amendments within one year following a hurricane's landfall. Hurricane Milton, the most recent storm to impact the city, made landfall on October 9, 2024. The proposed amendment is not considered more restrictive or burdensome, as it would make allowances for a previously prohibited use.

### FINDINGS AND CONCLUSIONS:

- The proposed amendment would allow for above-ground air curtain incinerators as an ancillary use to a Materials Recovery Facility, subject to supplemental regulations.
- The proposed amendment does not conflict with F.S. Chapter 2025-190.
- The proposed amendment does not conflict with the Property Rights Element of the Comprehensive Plan.

Staff recommends approval.

FISCAL IMPACT: N/A

### PROCUREMENT REVIEW: N/A

# **LEGAL REVIEW:**

The ordinance will be reviewed by the City Attorney, William E. Sexton.

# **ALTERNATIVE:**

- Approve with changes
- Deny
- Table

# **ORDINANCE 2026-XX**

AN ORDINANCE OF THE CITY OF OCALA, FLORIDA, CONCERNING ZONING; AMENDING SECTION 122-1225 OF THE CODE OF ORDINANCES TO AUTHORIZE THE USE OF AN ABOVE-GROUND AIR CURTAIN INCINERATOR AS AN ANCILLARY USE TO A MATERIALS RECOVERY FACILITY; PROVIDING FOR SEVERABILITY; PROVIDING FOR THE REPEAL OF CONFLICTING ORDINANCES; AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF OCALA, FLORIDA, in regular session, as follows:

Section 1. Section 122-1225 of the Code of Ordinances, City of Ocala, Florida is hereby amended by adding subsection (19), to read as follows:

### Sec. 122-1225. Materials Recovery Facility Criteria.

- (19) A materials recovery facility may include as an ancillary use the operation of an above-ground air curtain incinerator for the combustion of yard trimmings and vegetative debris delivered from off-site sources, subject to the following conditions. For purposes of this subsection, "above-ground air curtain incinerator" means a portable or stationary device that operates by forcefully projecting a curtain of air across an open, integrated combustion chamber in which combustion occurs and which is designed to contain combustion and limit visible emissions during the combustion of permitted vegetative debris.
  - a. Permitted material shall be limited to untreated wood and vegetative material including brush, grass clippings, pruned shrub and tree debris, discarded Christmas trees, nursery and greenhouse vegetative residuals, and vegetative matter resulting from landscaping development or land clearing. The above-ground air curtain incinerator shall not be used to burn any biological waste, hazardous waste, asbestos-containing materials, mercury-containing devices, pharmaceuticals, tires, rubber material, residual oil, used oil, asphalt, roofing material, tar, treated wood, plastics, garbage, trash or other material prohibited to be open burned as set forth in Florida Administrative Code. Only kerosene, diesel fuel, drip-torch fuel (as used to ignite prescribed fires), untreated wood, virgin oil, natural gas, or liquefied petroleum gas shall be used to start the fire in the above-ground air curtain incinerator. The use of used oil, chemicals, gasoline, or tires to start the fire is prohibited.
  - b. The above-ground air curtain incinerator shall be operated in compliance with all applicable federal, state, and local laws, including but not limited to Florida Department of Environmental Protection (FDEP) regulations, the Florida Administrative Code and the Florida Fire Code.
  - c. The above-ground air curtain incinerator shall only be operated a minimum of 200 feet from the property line of any residential zoning district, dwelling unit, church, daycare, school, hospital, or publicly accessible park and 100 feet from all other property lines. Greater setbacks may be required by the city based on site conditions or public health concerns.

- d. A site plan is required for the operation of an above-ground air curtain incinerator. The location and associated vegetative debris storage areas must be clearly identified on the site plan. The site plan may designate an operations area envelope within which the above-ground air curtain incinerator and material storage areas may be relocated from time to time, provided that all applicable setback requirements in subsection (c) are continuously met. All incinerator related activity shall be confined to the approved operations area envelope.
- e. Above-ground air curtain incinerator operation shall be limited to Monday through Friday, commencing no earlier than 8:00 a.m. and ceasing no later than one (1) hour before local sunset. Operation is prohibited on weekends and City-recognized holidays, except that upon request the City Manager may authorize extended hours of operation in response to natural disasters, declared emergencies, or other conditions requiring expedited debris management.
- f. An operations plan shall be submitted for approval along with the required site plan The plan shall, at a minimum, address procedures for use, fire prevention and suppression, emissions control, and odor and dust mitigation. Once approved by the city, a copy of the approved operations plan shall be maintained on-site at all times, and all operations shall be conducted in accordance with the plan.
- g. Residue or ash may remain within the above-ground air curtain incinerator burn chamber between operating periods, including to support hot starts consistent with manufacturer recommendations, and such in-chamber retention is not considered on-site storage. Accumulated ash shall be removed at intervals specified in the approved operations plan and sufficient to maintain safe, efficient operation and available capacity and shall be contained in closed containers or fully covered containment until transported to a lawful off-site beneficial-use outlet or permitted disposal facility. Ground stockpiles are prohibited.
- h. Unprocessed vegetative debris shall not remain on-site longer than fourteen (14) days prior to processing or burning, unless otherwise authorized by the City as part of the site plan or by subsequent written approval. In the event of a burn ban, air quality advisory, declared emergency, or other governmental order that temporarily prohibits processing or burning, the operator may maintain debris on-site for the duration of such order, provided the debris is managed to minimize fire risk, stormwater impacts, and nuisance conditions.
- i. The city approved operations plan shall be adhered to at all times. If determined by the building official that the use and operation of the ancillary use is not consistent with the approved site plan and operations plan, the building official shall immediately revoke approvals associated with the ancillary use.
- j. Suspension, revocation, or expiration of any required federal, state, or local permit or site plan approval shall result in the immediate cessation of operations unless and until new permits and/or a new or revised site plan has been approved.

Section 2. Severability Clause: Should any provision or section of this ordinance be held by a court of competent jurisdiction to be held unconstitutional or invalid, such decision shall not affect

the validity of this ordinance as a whole, or any part thereof, other than the part so declared to be unconstitutional or invalid.

Section 3. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 4. This ordinance shall take effect upon approval by the mayor, or upon becoming law without such approval.

Angel B. Jacobs City Clerk  Kristen Dreyer President, Ocala City Council  Approved / Denied by me as Mayor of the City of Ocala, Florida, on	ATTEST:	CITY OF OCALA			
City Clerk  Kristen Dreyer President, Ocala City Council  Approved / Denied by me as Mayor of the City of Ocala, Florida, on		Ву:			
President, Ocala City Council  Approved / Denied by me as Mayor of the City of Ocala, Florida, on	Angel B. Jacobs				
Approved / Denied by me as Mayor of the City of Ocala, Florida, on	City Clerk	Kristen Dreyer			
By: Ben Marciano Mayor  Approved as to form and legality:  William Sexton		President, Ocala City Council			
By: Ben Marciano Mayor  Approved as to form and legality:  William Sexton	• • • • • • • • • • • • • • • • • • • •	the City of Ocala, Florida, on			
Ben Marciano Mayor  Approved as to form and legality:  William Sexton					
Ben Marciano Mayor  Approved as to form and legality:  William Sexton		By:			
Approved as to form and legality:  William Sexton		Ben Marciano			
William Sexton		Mayor			
	Approved as to form and legality:				
	William Sexton				



# THE USE OF AIR CURTAIN DESTRUCTORS FOR FUEL REDUCTION AND DISPOSAL

Susan M. Zahn Fuels Management Specialist

- SUMMARY
- BACKGROUND
- **DESCRIPTION**
- EQUIPMENT
- OPERATION
- SDTDC EVALUATION
- CONCLUSIONS

All emissions evaluations and supporting data was provided by Ron Babbitt and the staff from U.S. Department of Agriculture (USDA) Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, Missoula, MT

#### **SUMMARY**

The San Dimas Technology and Development Center (SDTDC) evaluated the use of air curtain destructors (ACDs) as an efficient, environmentally friendly, technically feasible alternative in fuel reduction and disposal. SDTDC industry research found two companies, Air Burners LLC, of Palm City, FL, and McPherson Systems, Inc., of Tifton, GA, that manufacture the self-contained box-styled ACDs. These ACDs are air curtain incineration systems with a refractory-lined firebox. An engine supports the attached fan, which creates an air curtain across the top of the unit. During SDTDC se evaluation, both manufacturers ACDs efficiently disposed of large quantities of forest vegetation (fuels) at very high temperatures, while releasing very little emission particulate matter. This safer alternative to open burning is viable throughout the year except when fire danger is too high.

### **BACKGROUND**

This tech tip provides the latest information on air curtain destructors for fuel reduction and disposal. This information will be of interest to anyone concerned with fuels management issues.

Because vegetation reduction for wildfire mitigation and forest health is critical to fire and fuels management, researching alternative methods has become a top priority. Prescribed fire and pile burning have been the traditional methods of removing unwanted fuel and vegetation for many years. But weather conditions, air quality rules and regulations, and safety concerns (especially adjacent to wildland-urban-interface areas) have restricted the use of these methods. Although leaving vegetation onsite to decompose naturally is sometimes an alternative, decomposition can take many years and vegetation onsite does not alleviate fire risk. Decomposition can also increase the risk of outbreaks of unwanted insects. Chipping, grinding, and mulching are other alternatives, but their necessary removal and disposal may prove costly.

ACDs have been used throughout the world for several applications:

- · In forest fuel management and wildfire mitigation efforts.
- In the construction industry (to reduce debris from land clearing and demolition operations).
- · At landfill sites (to maximize costly space by reducing wood waste and similar burnable waste).
- · In disaster recovery (for clearing debris from storms or floods).

ACDs can operate safely and year round for vegetation disposal with few operating limitations. These limitations include fire conditions, required clearance from trees (or other fuel hazards), maximum allowable wind conditions, and the proper use of heavy equipment (figure 1).



Figure 1—ACD in full operation (no visible smoke).

### **DESCRIPTION**

The main operating principle of the ACD is blowing high-velocity air (curtain) across and into the upper portion of the combustion chamber (see figure 2). As the high-velocity air blows across the top, a rotational air current develops within the firebox. This powerful curtain of air has two effects: First, the high volume of air causes high oxygenation of the fire. Second, the high-velocity airflow over the combustion chamber entraps particulates (smoke). The high oxygenation helps to raise the burning temperature inside the unit, contributes to a more complete combustion process, and assists in reducing emissions and smoke. In addition, the high temperatures and oxygen-rich environment help combust �green, high-moisture vegetation.

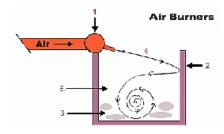


Figure 2—Air burner.

- 1. Air-curtain burner manifold and nozzles direct high-velocity airflow downward along refractory-lined walls.
- 2. Self-contained unit allows for fire containment and easy ash cleanup.
- 3. Vegetation to be burned.
- 4. Airflow forms an air curtain over the burning vegetation.
- Continuous airflow overoxygenates the burning vegetation, allowing for higher burning temperatures and a more complete burn.

### **EQUIPMENT**

Air Burners LLC manufactures several ACD models available through the General Services Administration. McPherson Systems, Inc., also offers various models and sizes of burners for permanent or portable use. Both manufacturers offer diesel or electric power with burn rates averaging from 1 to 15 tons per hour. The larger units are more difficult to transport onsite and require special permits for transport over roads. Some systems can be customized (check with manufacturer).



Figure 3—Skid-mounted ACD.

As figure 3 shows, the skid-mounted ACD is a self-contained system with a refractory-walled firebox, diesel engine powerplant, mechanical drive system, blower fan, and fuel tank. Both manufacturers engineered ACDs for transport by a lowboy or similar drop-deck trailer. This ease of transport increases flexibility, because operators can bring the ACD to the project site and avoid transporting vegetation elsewhere for processing. These ACDs are ready for use on arrival with minimal setup time. The refractory-lined firebox allows contained burning. The unit supports the diesel engine, fuel tank, and direct-drive system to operate the fan. An air-nozzle manifold is mounted on the backside of the firebox. The vegetation is loaded over the top of the ACD on the side opposite the manifold.

Both manufacturers created vertical refractory walls to aid combustion by retaining and reflecting the high temperatures that the firebox generates. The manufacturers state that the combustion process reduces the wood waste by about 98 percent, leaving only 2 percent in volume as residual ash. Twin refractory-lined panel doors at the rear of the firebox allow for ash removal. Both units are designed without bottom panels and sit directly above ground.

Because of the skids and durability of the Air Burners LLC unit, users can reposition it onsite or transport it from site to site, depending upon the terrain and distance. During transport the rear door panels can open for dumping ash. Users can empty the McPherson of ash by using a loader with a bucket. After the unit has cooled, the panels are disassembled. With both units, ash may be left in place, disposed of, or mixed with soil onsite or elsewhere.

#### **OPERATION**

Air curtain destructors are easy to operate and both units are almost identical. ACD operations follow three stages: startup, full operation, and burndown. For startup, operators partially load the firebox with layers of fine flammable forest vegetation, apply an accelerant (typically drip torch mix) over the layers, and cover it with heavier logs to just under the manifold. Ignition is via a fusee (similar to a road flare). Once the unit reaches its desired burning temperature and the heavier material starts to combust, the fan starts up and its speed gradually increases to full capacity. Although startup produces smoke, it decreases as the fan speed increases and the air curtain process approaches full operation. Depending on vegetation type and moisture content, startup burning takes about 1 hour and is complete when true combustion is observed (figure 4).



Figure 4— Approximately 5 tones of vegetation combusting.

During full operation, operators use mechanized equipment to feed vegetation into the burner at a steady rate. The best results were obtained by using an excavator with a grappler arm. An excavator with a bucket and thumb worked best for cleaning ash from the burner.

The last stage, known as burndown, typically takes about 2 to 3 hours, depending on the type and size of the vegetation. The unit is allowed to burn with no interruption to the air curtain. See figure 5. Once the materials inside burn down to under one half the height of the burner, operators slowly decrease the amount of air. After burndown, hot coals may remain for several days under an insulating blanket of ash. In the right conditions, operators may leave the ash in place to reignite new vegetation added the next day. Use caution when watering to cool the embers, cooler water may inadvertently splash water on the hot panels, possibly causing them to crack.

ACDs are designed to run for about 24 hours before ash removal, but running time depends on the vegetation stype and size. Long burns generally are more efficient (having lower emissions) than shorter burns. Efficiency starts to drop once the ash pile reaches about one-quarter to one-third of the firebox depth. For safe operation, have at least a 100-foot cleared space around the ACD. Barring extremely high winds, large embers are unlikely to escape the firebox and burn beyond the cleared area. Although small embers commonly are released from the burner during operation, they generally completely burn out before they hit the ground.

Safety should always be the number one consideration. Personnel must use all protective equipment, including personal protective clothing, and ensure that all mechanized equipment is clean and running efficiently. Operators should have a water source or fire engine and crew onsite to reduce the risk of possible fire spread. No one should operate an ACD if the fire danger is too high or if people or animals are likely to have unsupervised access around the burner site. Should conditions require shutdown, operators can extinguish the fire by using onsite soil to smother the combustion process in the unit.

### **SDTDC EVALUATION**

SDTDC entered into a partnership with the Wallowa-Whitman National Forest (Region 6), the San Bernardino National Forest (Region 5), and San Bernardino County Solid Waste Management to evaluate two commercially available air curtain units. SDTDC evaluated the Air Burners LLC model 217 in November 2002 on the Burnt Powder Fire Zone, Baker City, OR, and the McPherson Systems model M30 in June 2003 on the San Bernardino National Forest, Mountain Top Ranger District, Lake Arrowhead, CA.

The vegetation used during the evaluation was a combination of Jeffery Pine and Douglas Fir. Each evaluation surveyed combustion rates, ember release (from the units), and emissions. Evaluation results for both units were very positive. Combustion rates were within range of the manufacturers parameters. Emission evaluation results were favorable for both units. Table 1 shows the emissions of both units compared to broadcast and pile burning.



Figure 5— Photo shows results when the airflow is broken; a log smolders above the air curtain.

Table 1— Average emission factors for different management tools (pounds per ton).

	CO <sub>2</sub>	СО	CH <sub>4</sub>	NMHC	PM 2.5	CE (%)
Broadcast burning—Ponderosa Pine	3,286	179.8	6.6	5.4	36.0	90
Pile burning—Ponderosa Pine	3,268	178.5	13.9	9.9	25.5	89
LLC Air Curtain	3,616	26.3	1.4	1.1	1.1	99
McPherson Air Curtain	3,613	30	1.1	0.6	1.4	99

### **Explanation of Data**

 $CO_2$  = emission factor for carbon dioxide.

CO = carbon monoxide.

 $CH_4$  = methane based gases, such as propane and butane.

NMHC = nonmethane gases, such as benzene.

CE = combustion efficiency.

PM 2.5 = particulate matter expressed in pounds per ton. U.S. Environmental Protection Agency regulates particulate matter 2.5 and below.

#### CONCLUSIONS

ACDs offer a useful alternative to current fuel reduction and disposal methods.

#### ACDs:

- Produce lower smoke emissions compared to pile or broadcast burning.
- Burn a greater variety, amount, and size of materials from dead to green vegetation.
- Reduce fire risk and outbreak of insect problems.
- Operate with fewer restrictions in weather and burn conditions.
- Contain burn area to a specific site.

### **INFORMATION**

For further information regarding ACDs manufactured by Air Burners LLC, contact:

Brian O�Connor Air Burners LLC 4390 Cargo Way Palm City, FL 34990

Phone: 888 \$ 566 \$ 3900 or 772 \$ 220 \$ 7303

Web site: http://www.airburners.com

For further information regarding ACDs manufactured by McPherson Systems, Inc., contact:

McPherson Systems, Inc. Don McPherson Hwy. 82W 100 Springhill Church Rd.

Tifton, GA 31794

Phone: 229 386 2367

Web site: http://www.mcphersys.com

Additional information regarding the air curtain burner may be found on the San Dimas Technology and Development Center Intranet Web site at: http://fsweb.sdtdc.wo.fs.fed.us/. The SDTDC staff thanks Sally Haase, Research Forester, USDA Forest Service, Pacific Southwest Research Station, Forest Fire Laboratory, Riverside, CA, and Keith Windell, Mechanical Engineer, USDA Forest Service, Missoula Technology and Development Center, Missoula, MT, for reviewing this document.

#### ABOUT THE AUTHOR...

Susan Zahn has almost 20 years of employment with the USDA Forest Service on each of the southern California forests. Sue has worked in areas of fire suppression, prevention, fire rehabilitation, fuels, wilderness and trails management, and as a volunteer coordinator. Sue started working at SDTDC in 2002 as the fuels management specialist. Sue has been assigned to a Wildland Interagency Incident Management Team for 10 years. She also serves on many regional and interregional training cadres. She is a graduate of the University of La Verne, with a bachelor of science degree in public administration.

m

For Additional Information Contact:
Project Leader, Fire Management
San Dimas Technology & Development Center
444 East Bonita Avenue, San Dimas CA 91773-3198
Phone 909-599-1267; TDD: 909-599-2357; FAX: 909-592-2309

E-mail: mailroom wo sdtdc@fs.fed.us

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