

ORANGE



COUNTY
F L O R I D A

Modular Roundabout

Wyndham Lakes Blvd at Rodrick Circle

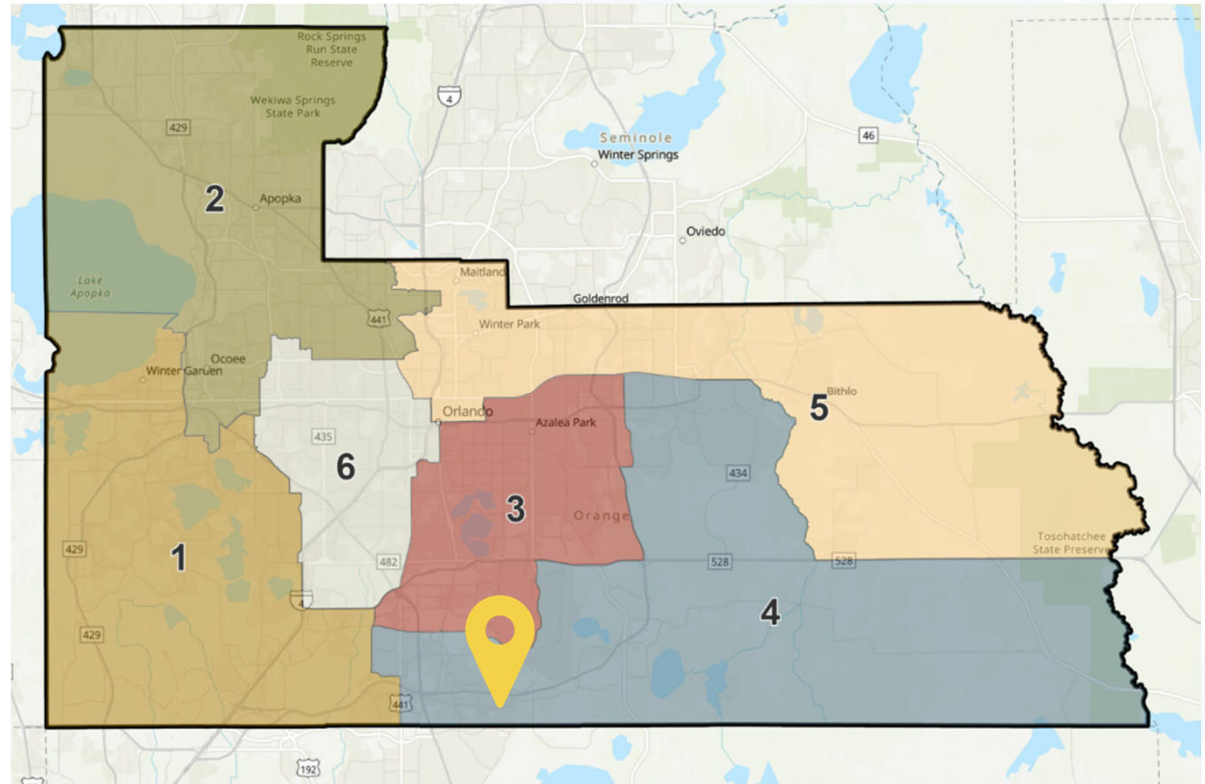
Public Works: Traffic Engineering Division

TransMAC

August 13, 2026

Presentation Overview

- Location
- Project Overview
- Modular Roundabout Evaluation
- Modular Roundabout Benefits
- Modular Roundabout Elements
- Construction Highlights
- Project Benefits
- Traditional vs. Modular
- Key Takeaways
- Questions & Comments



Project Location

Location



Wyndham Lakes Blvd at Rodrick Circle (District 4)

Project Overview

- Existing conditions
 - **Wyndham Lake Blvd:** 4-lane divided collector arterial; 35 MPH
 - **Rodrick Circle:** residential street; 25 MPH
- Resident concerns
 - Difficulty entering/exiting at Rodrick Circle
 - Speeding
 - Sightline concerns due to roadway curvature



Project Overview

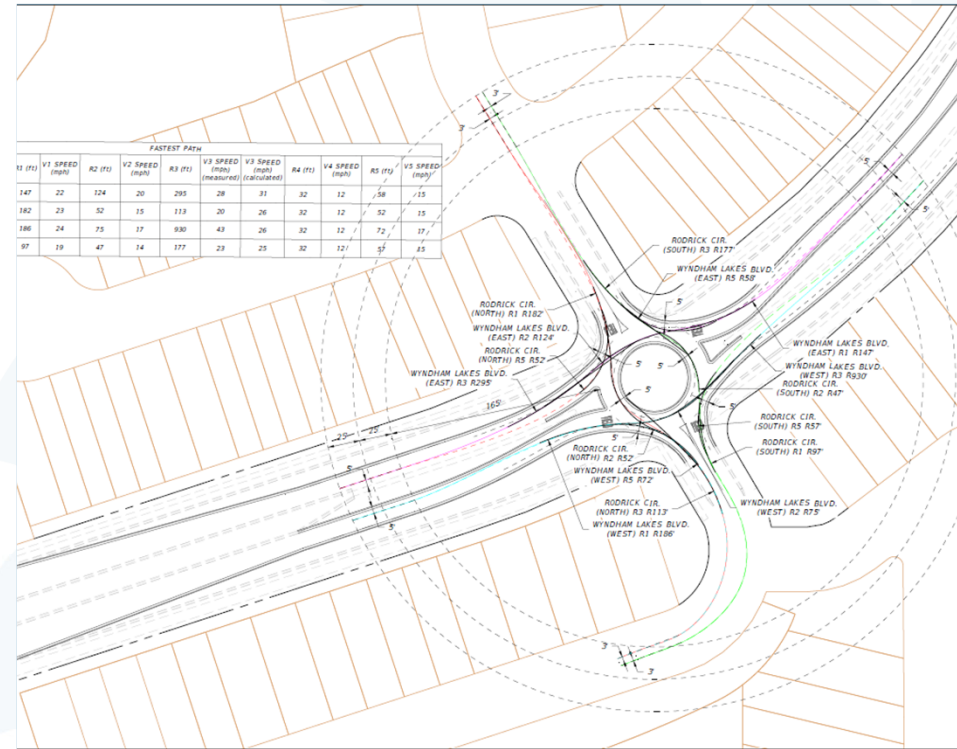
- Intersection evaluation
 - Sightline evaluation
 - Signal warrant analysis
- Intersection not warranted for signal
- Look at alternatives
 - Fast response
 - Quick-build
 - Cost
 - Right of way constraints
- Recommended improvement Modular Roundabout



Modular Roundabout Evaluation

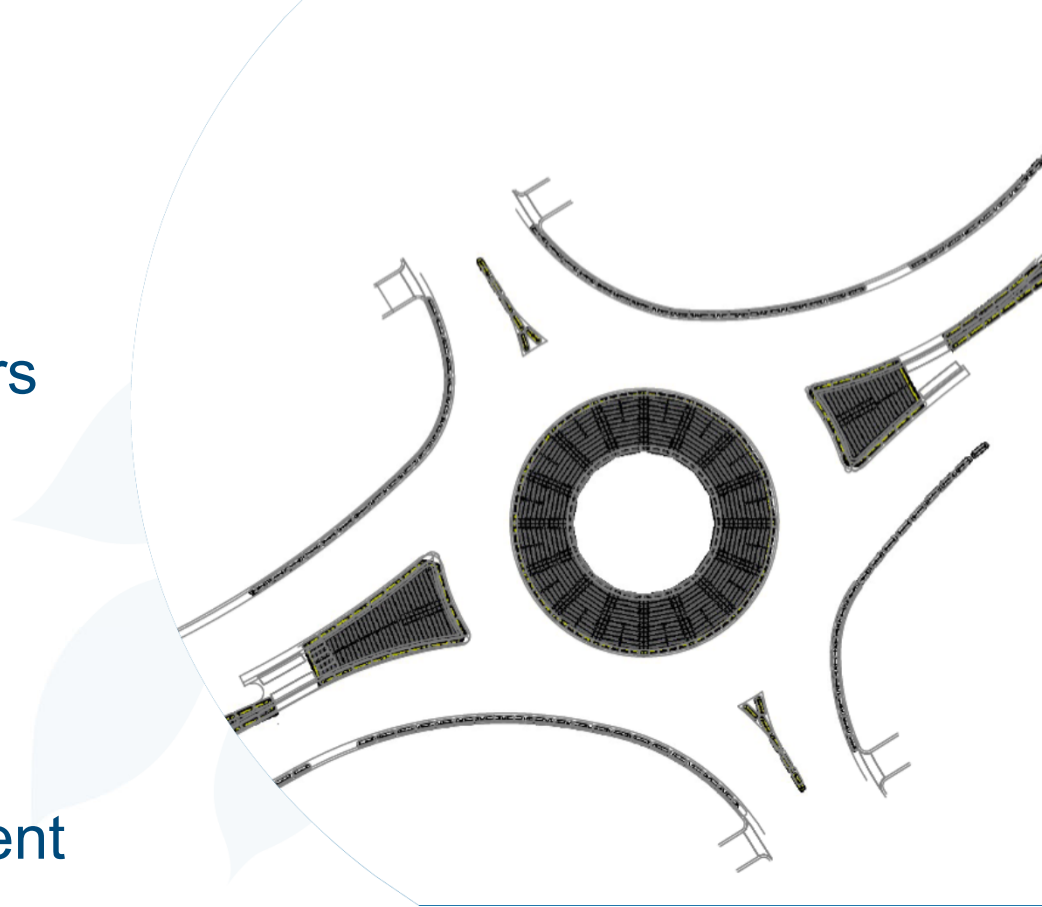
Analysis

- **Concepts evaluated:**
 - 2-lane roundabout
 - 2-lane roundabout: limited ROW
 - Geometric constraints
 - Difficulties navigation
 - 1-lane roundabout
 - No additional ROW
 - Meet existing capacity
 - Geometric alignment

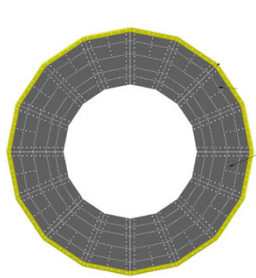


Modular Roundabout Benefits

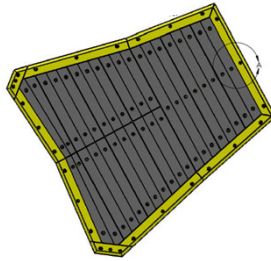
- 1-lane roundabout accommodates future traffic volumes
- Entry speeds below FDOT 25 MPH threshold
- Designed for trucks and semi-trailers movements
- Minimal roadway modifications required
- Quick-build
- Prefabricated modular components attached directly to existing pavement



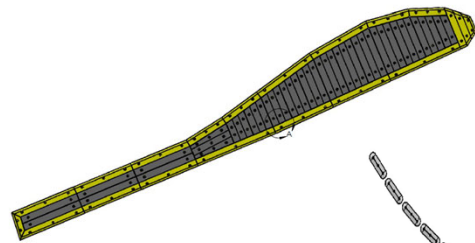
Modular Roundabout Elements



Center Island



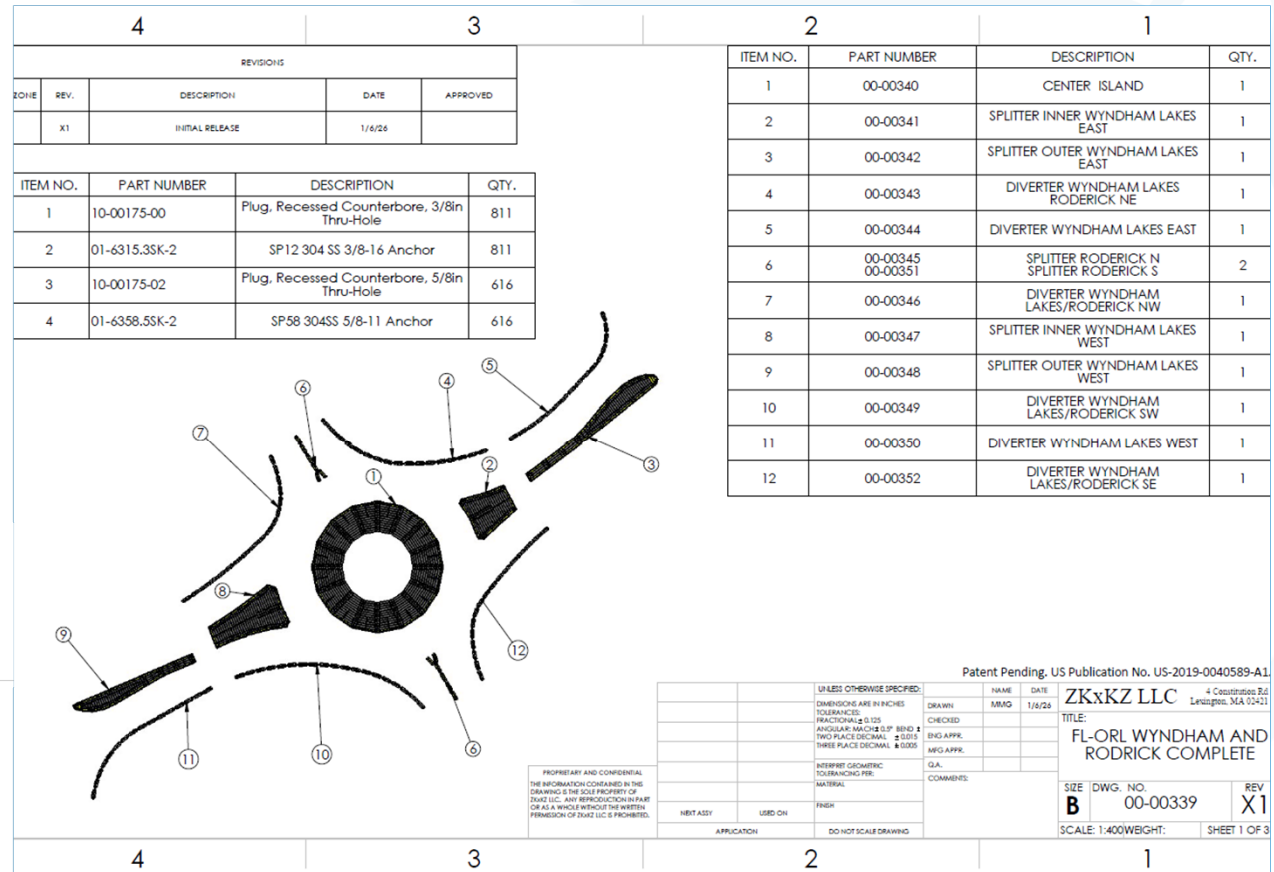
Splitter Inner



Splitter Outer



Diverter



Construction Highlights

Week One



Week Two



Week Three



Construction Highlights



Project Benefits

- Improved safety and traffic calming
- Better neighborhood access
- Enhanced pedestrian accessibility
 - Curb ramp upgrades
- Additional safety features
 - New speed tables
 - New lighting
 - New pavement markings
- Reduced construction time with minimal disruption



Traditional vs. Modular

The modular roundabout delivered significant savings while maintaining mobility throughout construction, with no modifications required to the existing drainage system or pavement beyond a seal coat.

	Roundabout Design	
	Traditional (1-Lane)	Modular
Project cost	\$1.5M +	\$550,000
Construction time	8 - 12 Months	17 - 21 days
Detours (MOT)	Yes	No
Estimated savings	---	60% - 70%

Key Takeaway

The Wyndham Lakes Blvd at Rodrick Circle modular roundabout demonstrates how innovative, quick-build solutions can improve safety, calm traffic, and deliver substantial cost savings while minimizing impacts to the traveling public.



Project Highlights



OCFL UPDATE

Questions & Comments



Thank you!

