



Marion County

Board of County Commissioners

Workshop

Meeting Agenda

Wednesday, December 11, 2024 10:30 AM

McPherson Governmental
Campus Auditorium

Workshop to Discuss the Intersection Design for SW 80th Avenue at SW 38th Street for the SW 80th Avenue - Segment 1 Project (from SW 80th Street to 1/2 Mile North of SW 38th Street)

INTRODUCTION OF WORKSHOP BY CHAIR KATHY BRYANT

PLEDGE OF ALLEGIANCE

ROLL CALL

WORKSHOP PRESENTATION

1. [Workshop Regarding the Intersection Design for SW 80th Avenue at SW 38th Street for the SW 80th Avenue - Segment 1 Project \(from SW 80th Street to 1/2 Mile North of SW 38th Street\)](#)

BOARD DISCUSSION AND CLOSING COMMENTS



Marion County

Board of County Commissioners

Agenda Item

File No.: 2024-17500

Agenda Date: 12/11/2024

Agenda No.: 1.

SUBJECT:

Workshop Regarding the Intersection Design for SW 80th Avenue at SW 38th Street for the SW 80th Avenue - Segment 1 Project (from SW 80th Street to 1/2 Mile North of SW 38th Street)

INITIATOR:

Steven Cohoon, P.E., County Engineer

DEPARTMENT:

Office of the County Engineer

DESCRIPTION/BACKGROUND:

SW 80th Avenue is an existing corridor that runs between SR 200 to north of US 27. It is in various phases of design and construction to be widened from two-lanes to four-lanes. Guerra Development Corporation (GDC) is providing consultant services for the Office of the County has retained Kimley Horn and Associates, Inc. (KHA) as a sub-consultant for the SW 80th Avenue - Segment 1 Project, the portion of the corridor from SW 80th Street to 1/2 Mile North of SW 38th Street. During today's Workshop, the team will present alternatives for the intersection of SW 80th Avenue at SW 38th Street. The alternatives have been analyzed based on multiple criteria.

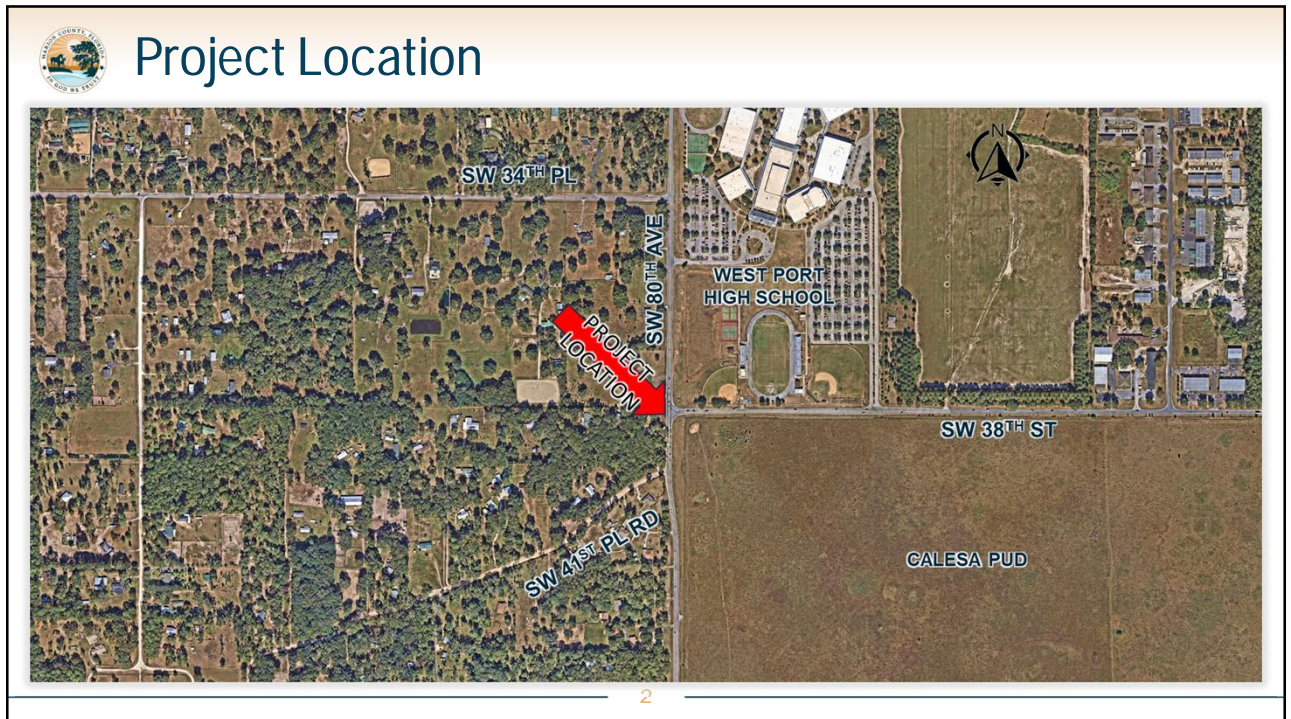
Upon Board direction, the SW 80th Avenue and/or SW 38th Street PERs may need to be updated and the selected alternative(s) incorporated into the design.

BUDGET/IMPACT:

None

RECOMMENDED ACTION:

Board discussion and recommendation for presented alternatives.





History

- SW 80th Avenue PER was approved by the BOCC in November 2021
- Design of SW 80th Avenue began in October 2023
- Multiple intersection concepts reviewed for SW 38th Street at SW 80th Avenue



Preliminary Engineering Report SW/NW 80th/70th Avenue

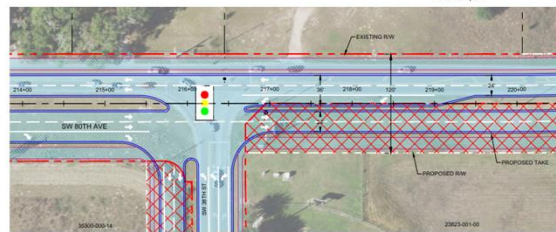


(From S.W. 90th St. to 1/4 mile north of U.S. HWY 27)
Marion County, Florida
November, 2021

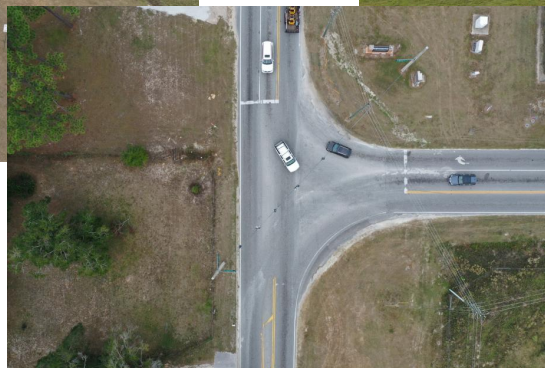


Prime Consultant:
Guerra Development Corp.

Support Team:
Universal Engineering Sciences, Inc.
Kinley Horn & Associates, Inc.
Silverline & Associates, Inc.
Water & Air Research, Inc.
SouthArc, Inc.



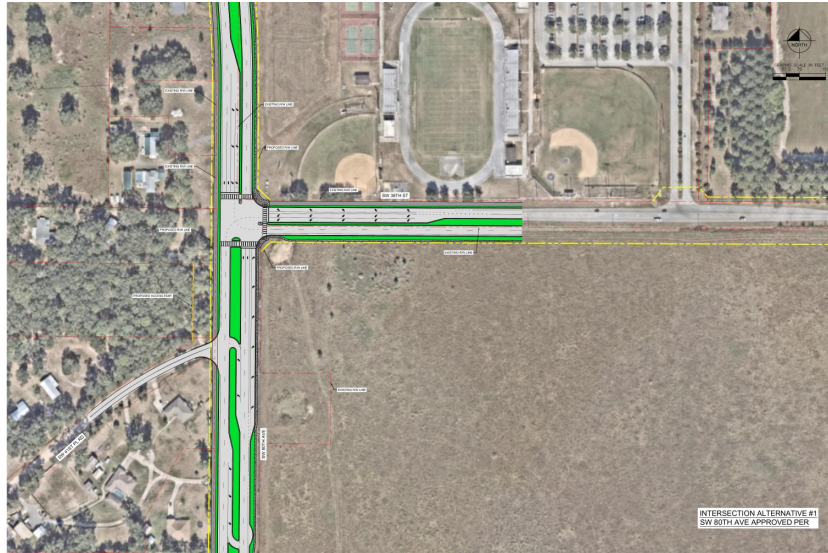
Existing Conditions – SW 80th Ave at SW 38th St





Intersection Control Alternatives

Alternative #1 – Modified PER

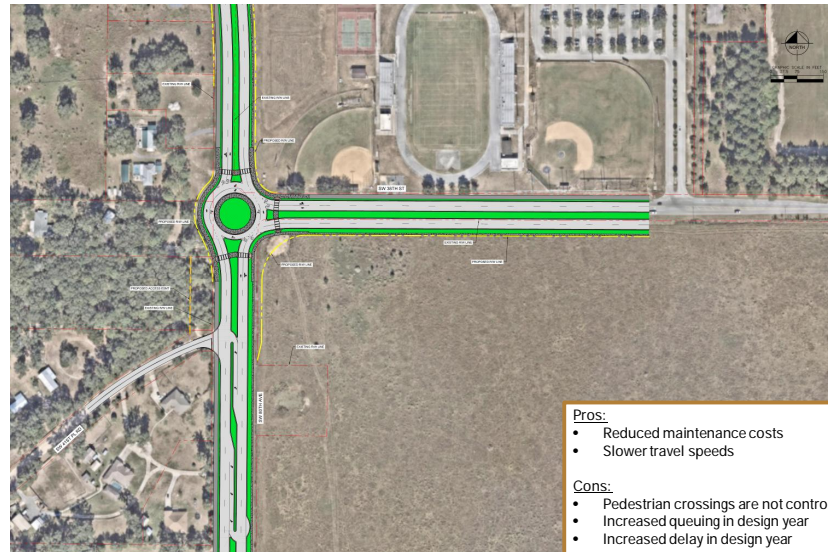


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Intersection Control Alternatives

Alternative #2 – Roundabout



Pros:

- Reduced maintenance costs
- Slower travel speeds

Cons:

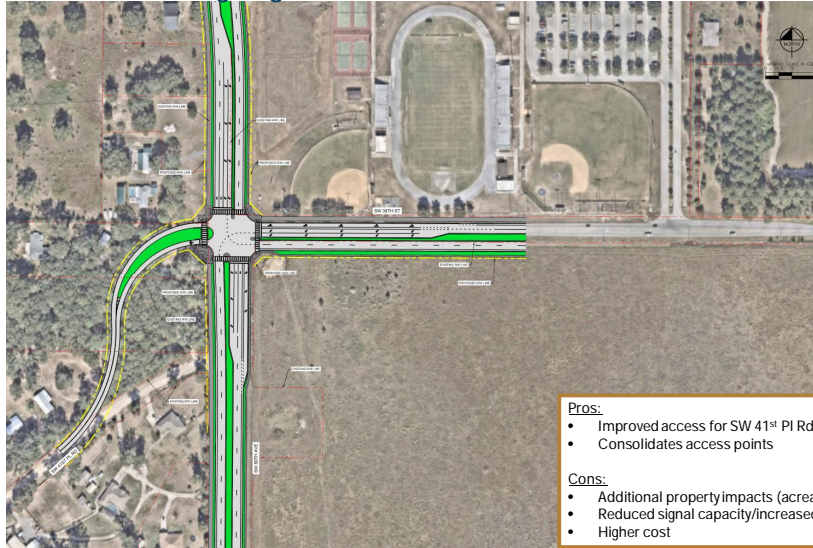
- Pedestrian crossings are not controlled
- Increased queuing in design year
- Increased delay in design year

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Intersection Control Alternatives

Alternative #3 – 4-Leg Signal



Pros:

- Improved access for SW 41st PI Rd
- Consolidates access points

Cons:

- Additional property impacts (acreage)
- Reduced signal capacity/increased delay
- Higher cost

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Intersection Control Alternatives

Alternative #4 – 4-Leg Roundabout



Pros:

- Improved access for SW 41st PI Rd
- Consolidates access points
- Less disruption to traffic during construction
- Reduced maintenance costs
- Slower travel speeds

Cons:

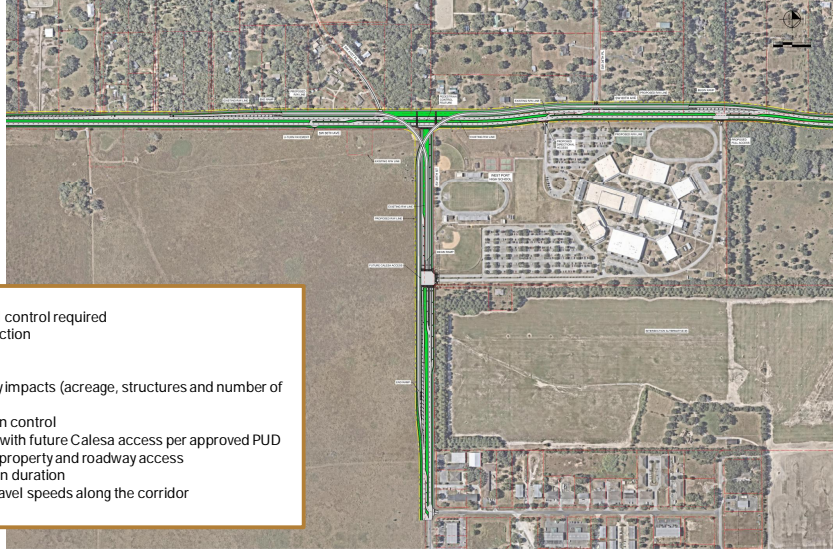
- Additional property impacts (acreage and structures)
- Pedestrian crossings are not controlled
- Increased queuing in design year
- Increased delay in design year
- Higher cost

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Intersection Control Alternatives

Alternative #5 – Overpass



Pros:

- No vehicular signal control required
- No delay at intersection

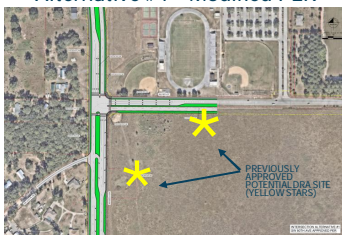
Cons:

- Additional property impacts (acreage, structures and number of parcels)
- Modified pedestrian control
- Potential conflicts with future Calesa access per approved PUD
- Restricts adjacent property and roadway access
- Longer construction duration
- Promotes higher travel speeds along the corridor
- Most costly option

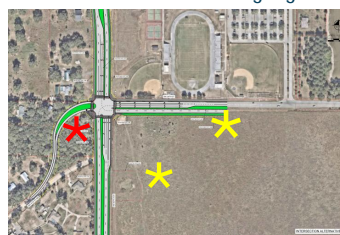


Drainage Considerations

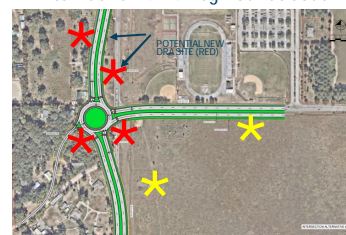
Alternative #1 – Modified PER



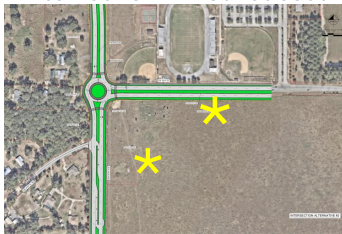
Alternative #3 – 4-Leg Signal



Alternative #4 – 4-Leg Roundabout



Alternative #2 – Roundabout



Alternatives	ALL DRA Locations Agree with PER	DRA Size (Ac) (Concept Comparison Only)	Drainage Recommendations
Alternative 1 (Modified PER)	Yes	7.98	Utilize PER DRA locations
Alternative 2 (Roundabout)	Yes	8.15	Utilize PER DRA locations
Alternative 3 (4-Leg Signal)	No	Over 8.11	Potential new DRA sites not recommended; not efficient;
Alternative 4 (4-Leg Roundabout)	No	Over 8.44	Potential new DRA sites not recommended; not efficient;
Alternative 5 (Overpass)	Yes	10.40	Largest DRA footprint; longer design schedule



Alternative Comparison

Alternatives	Opinion of Probable Construction Cost	Potential Property Impact Cost	Number of Potential additional Parcel Impacts vs Modified PER
Alternative 1 (Modified PER)	\$5,826,000	\$565,000 to \$1,882,000	Same
Alternative 2 (Roundabout)	\$5,907,000	\$515,000 to \$1,715,000	6 Fewer Properties
Alternative 3 (4-Leg Signal)	\$6,320,000	\$755,000 to \$2,516,000	4 Fewer Properties
Alternative 4 (4-Leg Roundabout)	\$6,485,000	\$1,902,000 to \$6,340,000	4 Fewer Properties
Alternative 5 (Overpass)	\$49,500,000	\$1,000,500 to \$3,335,000	13 Additional Properties

Evaluation Criteria	Alternative 1 (Modified PER)	Alternative 2 (Roundabout)	Alternative 3 (4-Leg Signal)	Alternative 4 (4-Leg Roundabout)	Alternative 5 (Overpass)
Cost	\$	\$	\$\$	\$\$\$	\$\$\$\$
Intersection Delay	Same	Greater	Greater	Greater	Less
Impact to School Property	Same	Same	Same	Less (No Direct Impacts)	Same
Property Impacts (Acreage)	Same	Similar	Greater	Greater	Greater
Property Impacts (Structures)	Same	Same	Same	Greater (5 additional structures)	Same
Pedestrian Control	Same	Less	Same	Less	Less
Side Street and Driveway Accessibility	Same	Similar	Modified	Modified	More restriction
Potential Impact to Vehicular Travel Speeds	Same	Decreased	Same	Decreased	Increased

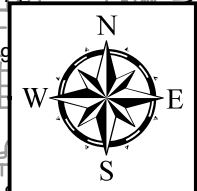
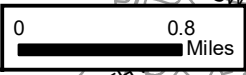
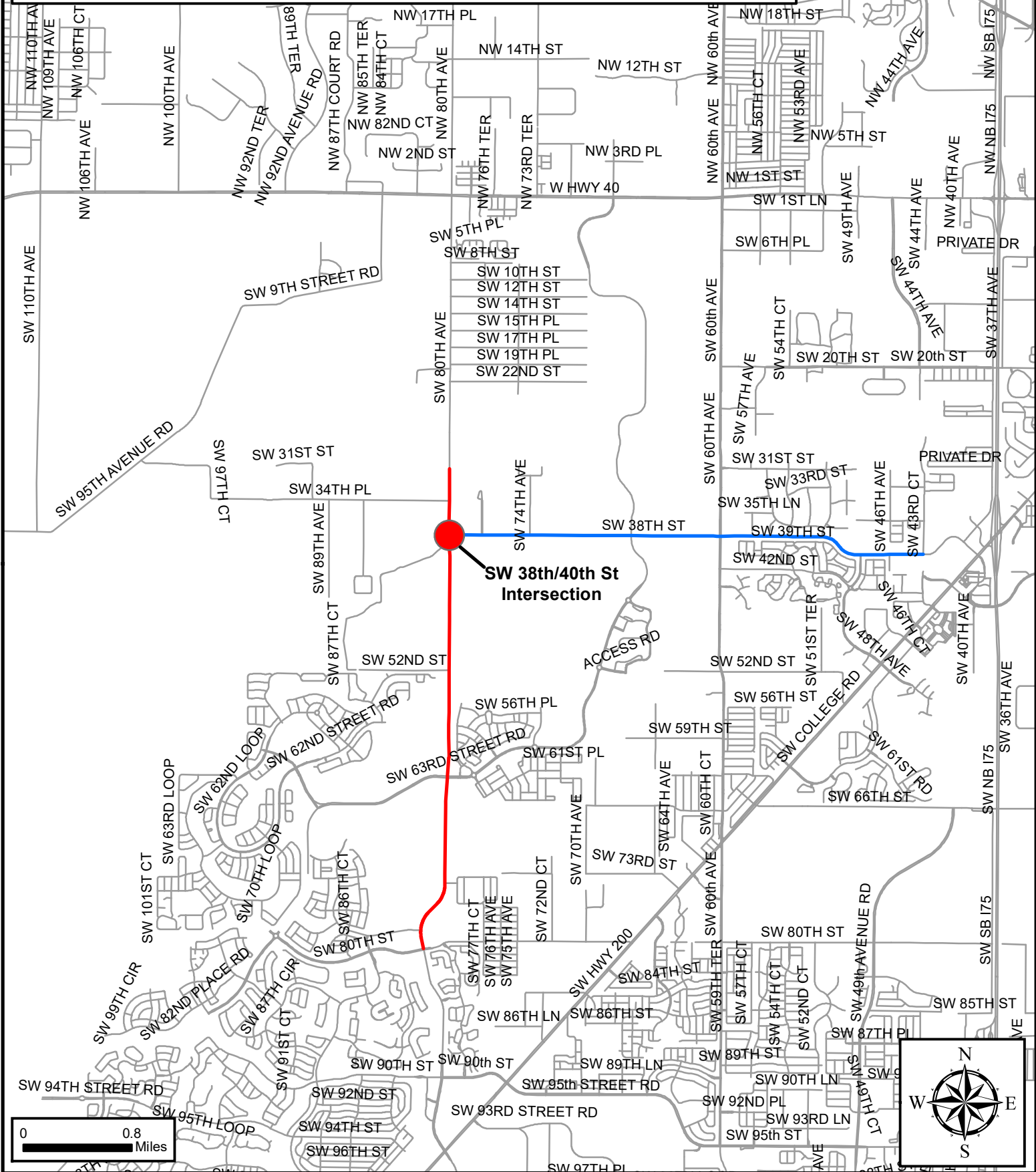
Kimley»Horn

SW 80th Avenue at SW 38th Street Intersection Design

Board of County Commissioners Workshop
December 11th, 2024

SW 80th Ave Segment 1 (From SW 80th St to 1/2 mile North of SW 38th St)

- Project
- Associated Project
- Streets



Map Location:
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Engineering Services\Doug Hinton\
SW80AVE_Seg1_102524

Technician: LB
Printed: 10/25/2024

Marion County Office of the County Engineer
Asset Management Section
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