

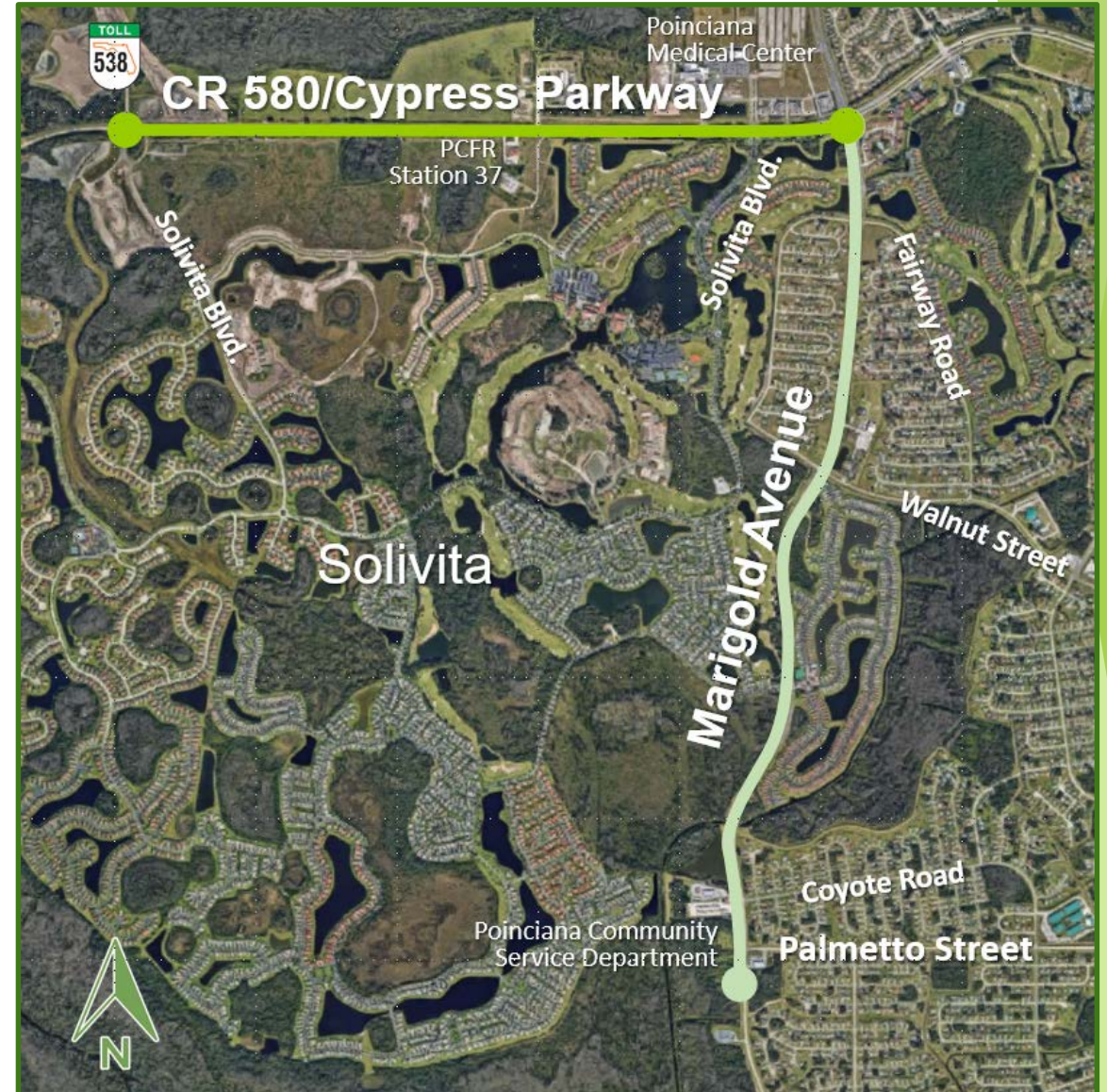
ALIGNMENT STUDY

Marigold Avenue and Cypress Parkway (CR 580)

Marigold Avenue from Palmetto Street to Cypress Parkway and
Cypress Parkway (CR 580) from Solivita Blvd. to Marigold Avenue

Alignment Study Project Description

- ▶ **Marigold Avenue** - two-lane undivided roadway from south of Palmetto Street transitioning to a four-lane divided roadway approaching Cypress Pkwy. (approximately 2.2 miles)
- ▶ **Cypress Parkway** - two-lane undivided roadway from west of Solivita Blvd. transitioning to a four-lane divided roadway approaching Poinciana Medical Center (approximately 1.9 miles)
- ▶ Both existing roadways classified as **Urban Collectors**
- ▶ Land use is **mostly residential blended with commercial**
- ▶ Alignment study developed and evaluated alternative roadway alignments to **recommend a preferred alignment and prepare plans for widening** Marigold Avenue and Cypress Pkwy. (CR 580)
- ▶ Only considered Rural typical cross section for Cypress Pkwy.
- ▶ Typical Cross Sections analyzed for Marigold Avenue:
 - ❖ Urban
 - ❖ Suburban
 - ❖ Rural



Project Approach

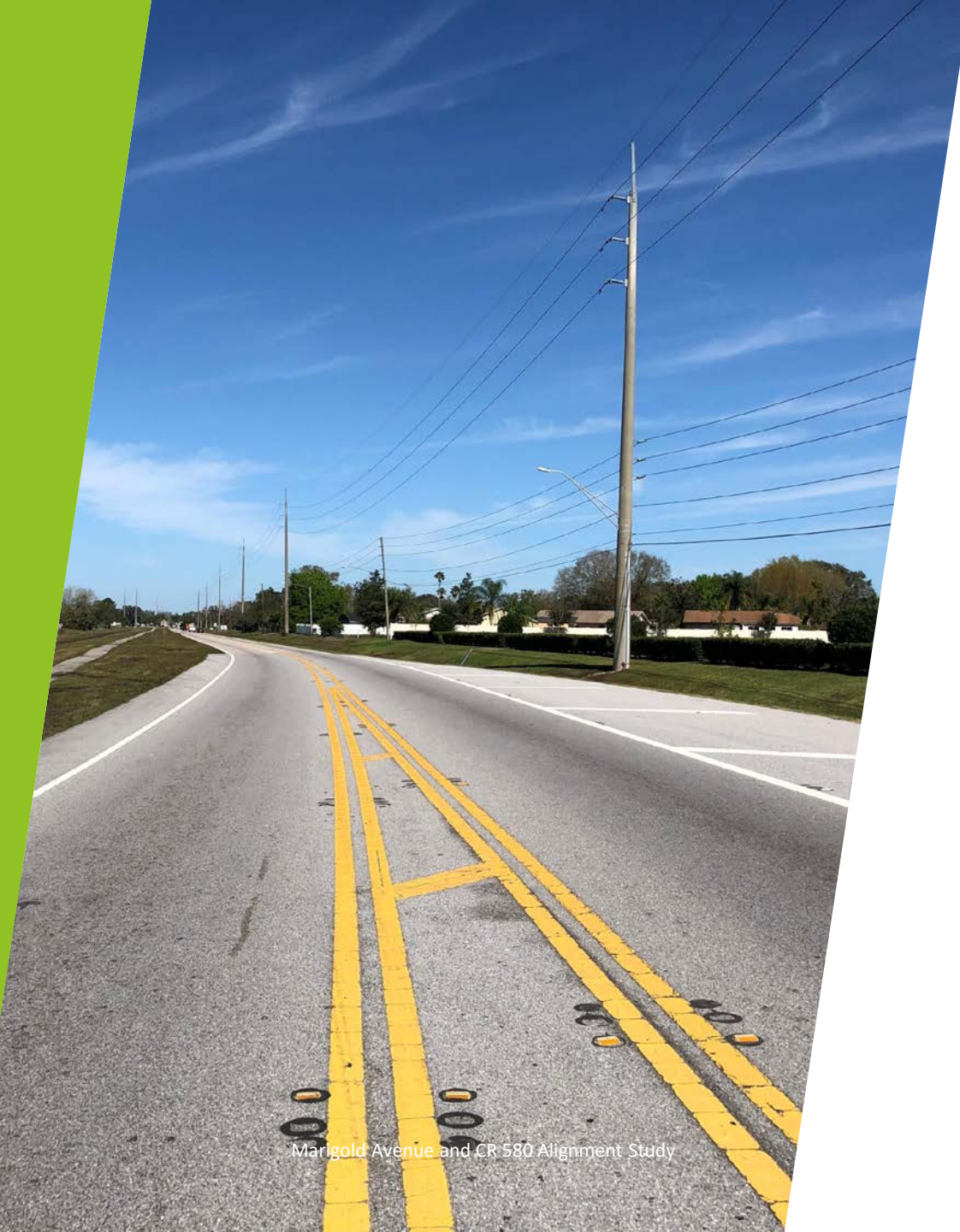
- ▶ **Assess all Previous Studies and Designs** in the Area
- ▶ Inventory the Study Area
- ▶ Collect Physical, Environmental, Engineering and Community Data
- ▶ **Determine Purpose and Need**
- ▶ Identify Constraints
- ▶ Establish Conceptual Designs
- ▶ **Develop Viable Alternatives**
- ▶ Identify Physical, Environmental, Cultural and Engineering Impacts
- ▶ Prepare Draft Environmental and Engineering Documents
- ▶ Prepare Preliminary Construction and Right-of-Way Cost Estimates
- ▶ **Recommend Viable Alternatives**
- ▶ Prepare Final Reports and Documentation



Marigold Avenue and CR 580 Alignment Study

Project Need

- ▶ Identified in Polk County Comprehensive Plan (Transportation Element)
- ▶ Polk TPO 2040 LRTP identifies widening as a need
- ▶ Future Southport Connector will add broader road network connectivity
- ▶ Traffic Study identified need for a 4-lane roadway and intersection improvements
- ▶ Crash data indicates safety issues along the corridors



Typical Cross Section Alternatives

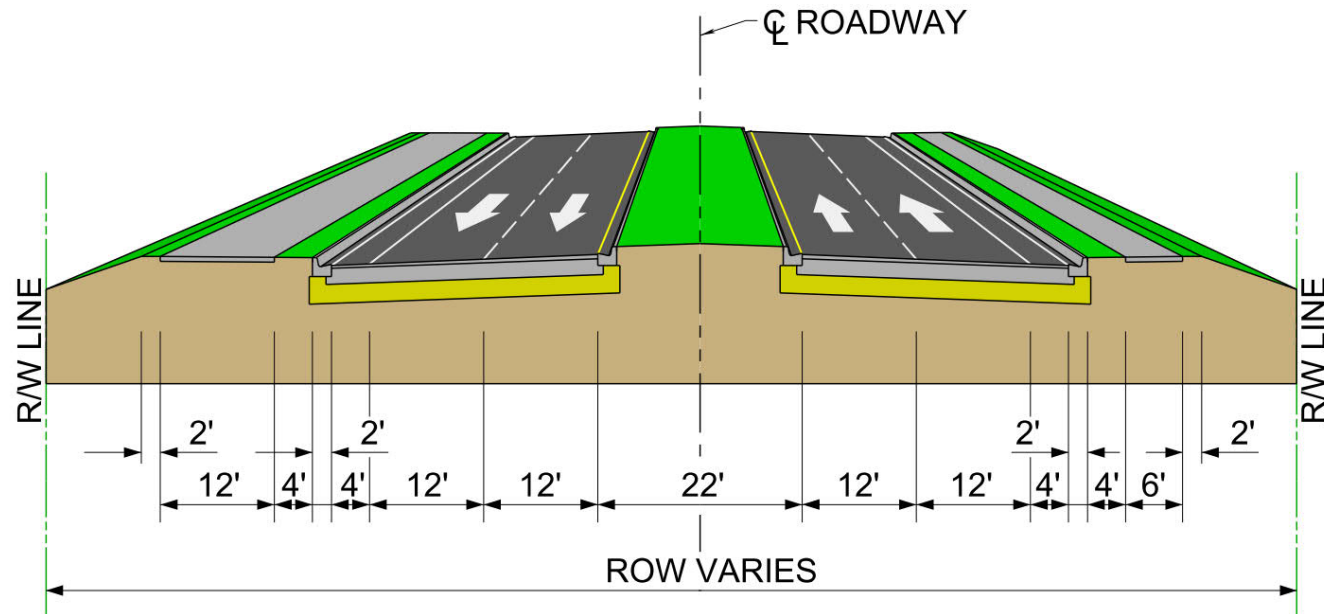
Marigold Avenue:

- **Existing:** Two-lane rural roadway within **150' of right-of-way**
- **Studied:** Urban, Suburban, and Rural **4-Lane Typical Cross Sections with three Alternative Alignments** (left, center and right of the current roadway)
- **Recommend:** Urban **4-Lane Typical Cross Section on a center alignment** with stormwater retention system, bike lanes, 6' wide concrete sidewalk and 12' wide asphalt multi-use trail

Cypress Parkway:

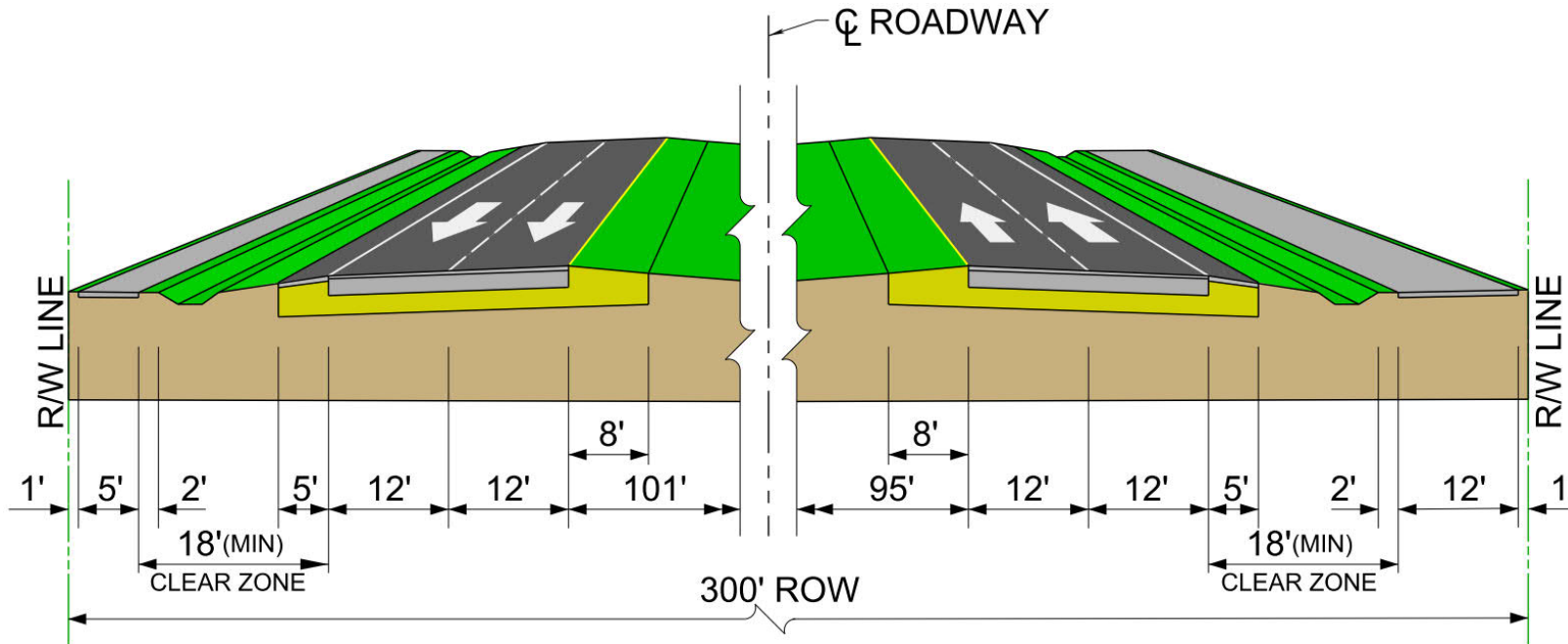
- **Existing:** Two-lane roadway transitioning to a four-lane rural roadway within **300' of right-of-way**
- **Studied:** Due to width of existing right-of-way, **only one alternative was evaluated**
- **Recommend:** Rural **4-lane Typical Cross Section on a center alignment** with open drainage (swale) system, 5' wide paved shoulders, 5' wide concrete sidewalks, and 12' wide asphalt multi-use trail

Marigold Avenue Proposed Typical Cross Section



Marigold Avenue Typical Section
Urban

Cypress Parkway Proposed Typical Cross Section



CR 580 Typical Section Rural

Alternative Alignment Constraints

- ▶ **Maintenance of Traffic**
- ▶ **Drainage considerations**
- ▶ **Minor wetland impacts within the existing right-of-way**
- ▶ **Threatened and Endangered Species**
 - ✓ Wood stork
 - ✓ Bald eagles
- ▶ **Floodplain compensation**
- ▶ **Potential Contamination Sites**
 - ✓ None
- ▶ **Cultural Effects**
 - ✓ None
- ▶ **Business or Residential Relocations**
 - ✓ None
- ▶ **Existing Utilities Along Corridor**
 - ✓ Central Florida Expressway Authority
 - ✓ Century Link
 - ✓ Charter Communications
 - ✓ Duke Energy
 - ✓ Frontier
 - ✓ Osceola County Traffic
 - ✓ Sprint

Alignment Study Evaluation Matrix

EVALUATION FACTORS	MARIGOLD AVENUE			CYPRESS PARKWAY (CR 580)
	URBAN	SUBURBAN	RURAL	RURAL
RIGHT OF WAY				
ROADWAY	0.058 AC	Add 20 LF along Marigold Ave.	Add 31 LF along Marigold Ave.	0
PONDS	(REQUIRED FOR ALL ALTERNATIVES)			0
FLOODPLAIN COMPENSATION	(REQUIRED FOR ALL ALTERNATIVES)			0
SOCIAL EFFECTS				
COMMUNITY IMPACTS	MINIMUM	MINIMUM	MINIMUM	0
ARCHEOLOGICAL SITES	0	0	0	0
PARKS/PREERVES/REFUGES	0	0	0	0
NATURAL/PHYSICAL ENVIRONMENT				
ROADWAY WETLAND IMPACTS (AC)	3.06 AC IMPACTED			
POND /FLOODPLAIN COMP WETLAND IMPACTS (AC)	10.05 AC IMPACTED			
POTENTIAL CONTAMINATION IMPACTS	0	0	0	0
CULTURAL RESOURCES	0	0	0	0
ESTIMATED PROJECT COSTS (\$ MILLIONS)				
CONSTRUCTION COST	39.00	34.69	34.66	INCLUDED w/ MARIGOLD AVENUE ALTERNATIVES
DESIGN (8% CONSTRUCTION)	3.12	2.78	2.77	
CEI (8% CONSTRUCTION)	3.12	2.78	2.77	
TOTAL COST	\$45.24 M	\$40.24 M	\$40.21 M	



Next Steps

- ▶ Review public comments from online workshop
 - ▶ Collect input from the Polk County Board of County Commissioners
 - ▶ Design phase
 - ▶ Right-of-way acquisition
 - ▶ Utility relocations
 - ▶ Roadway construction
- } Schedule(s) to be determined