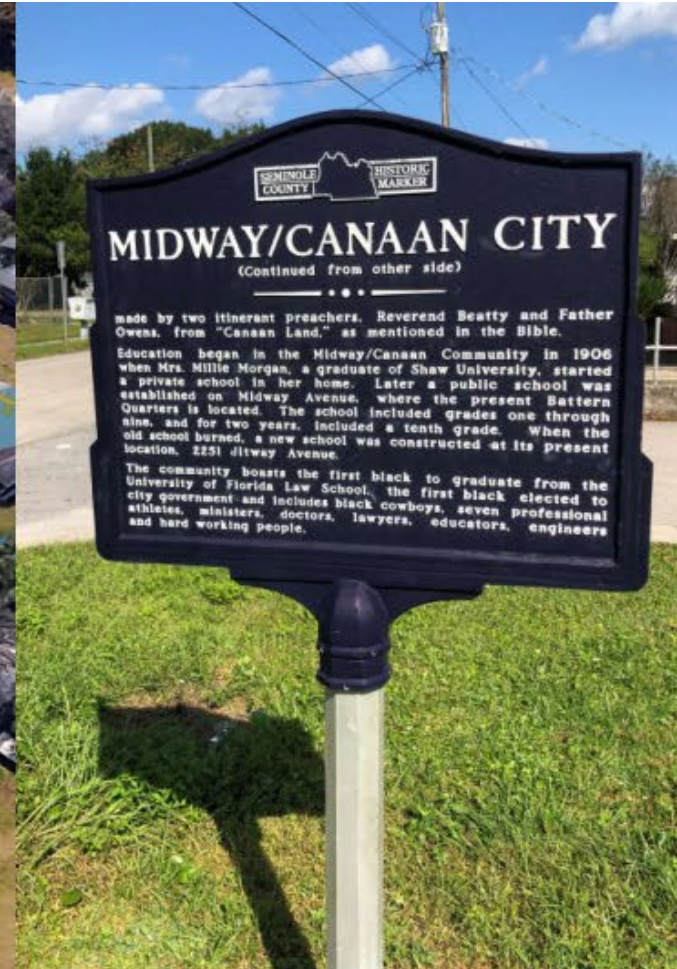


Midway Basin Drainage Improvements Project



Public Meeting



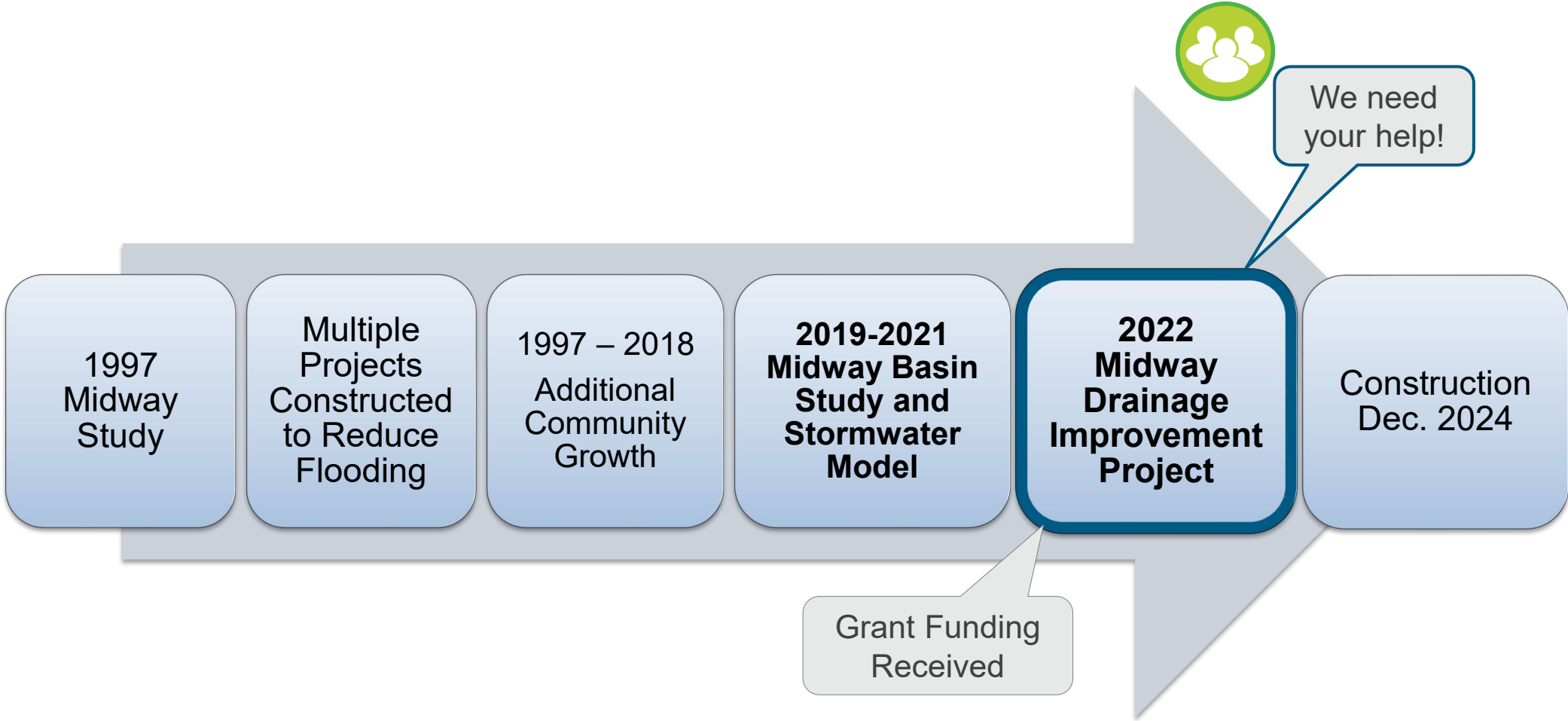
Meeting Outline



- Project History
- Midway Basin Study
- Current Project Goals
- Project Description
- Schedule
- Easement Needs
- Feedback




Project History & Review of Midway Basin Study

Project History

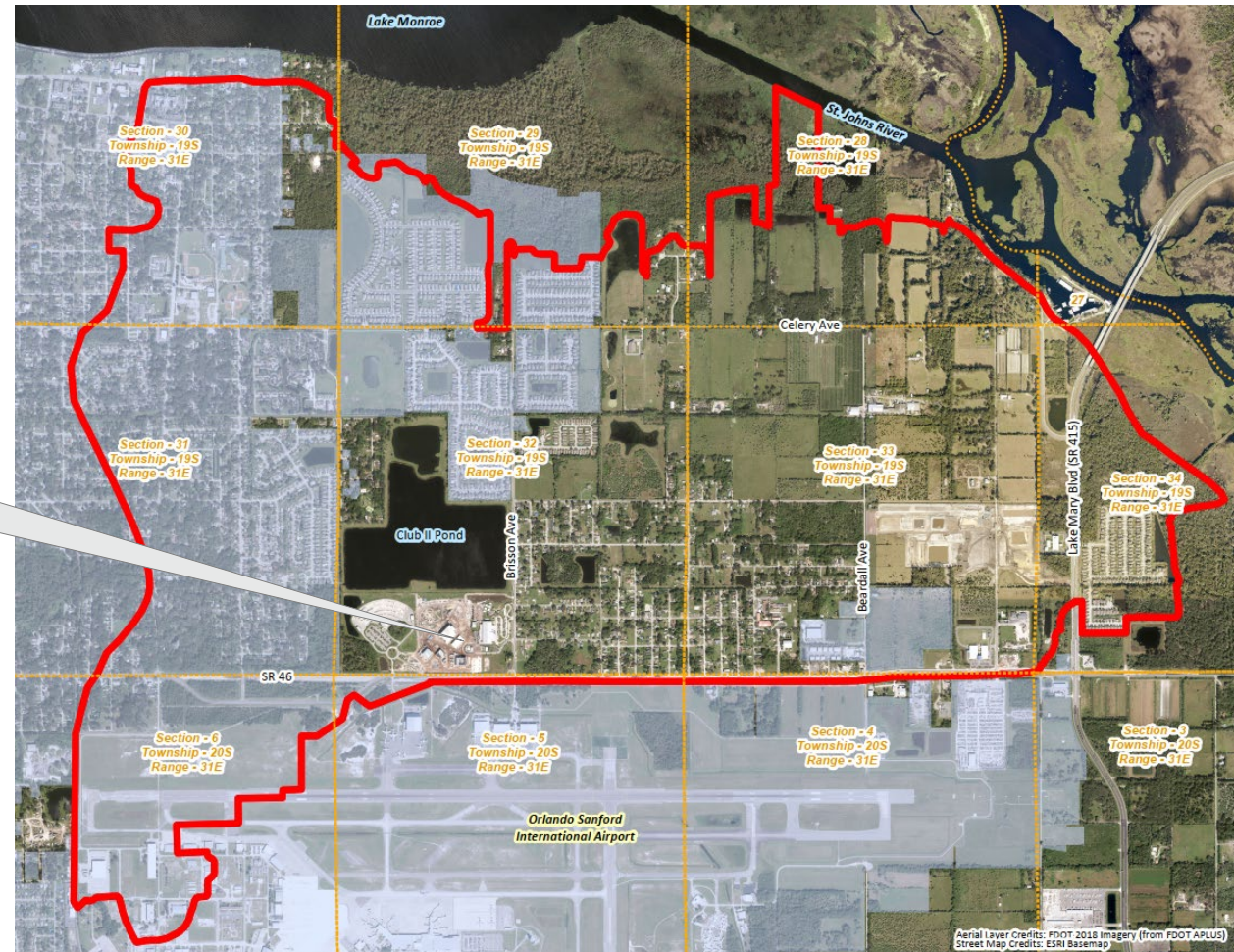


Basin Information

Legend

-  Section-Township-Range
-  Midway Basin (4.3 square miles, 2.4 square miles unincorporated)
-  City of Sanford (1.9 square miles within Midway Basin)

Non-Shaded Area is Unincorporated Seminole County



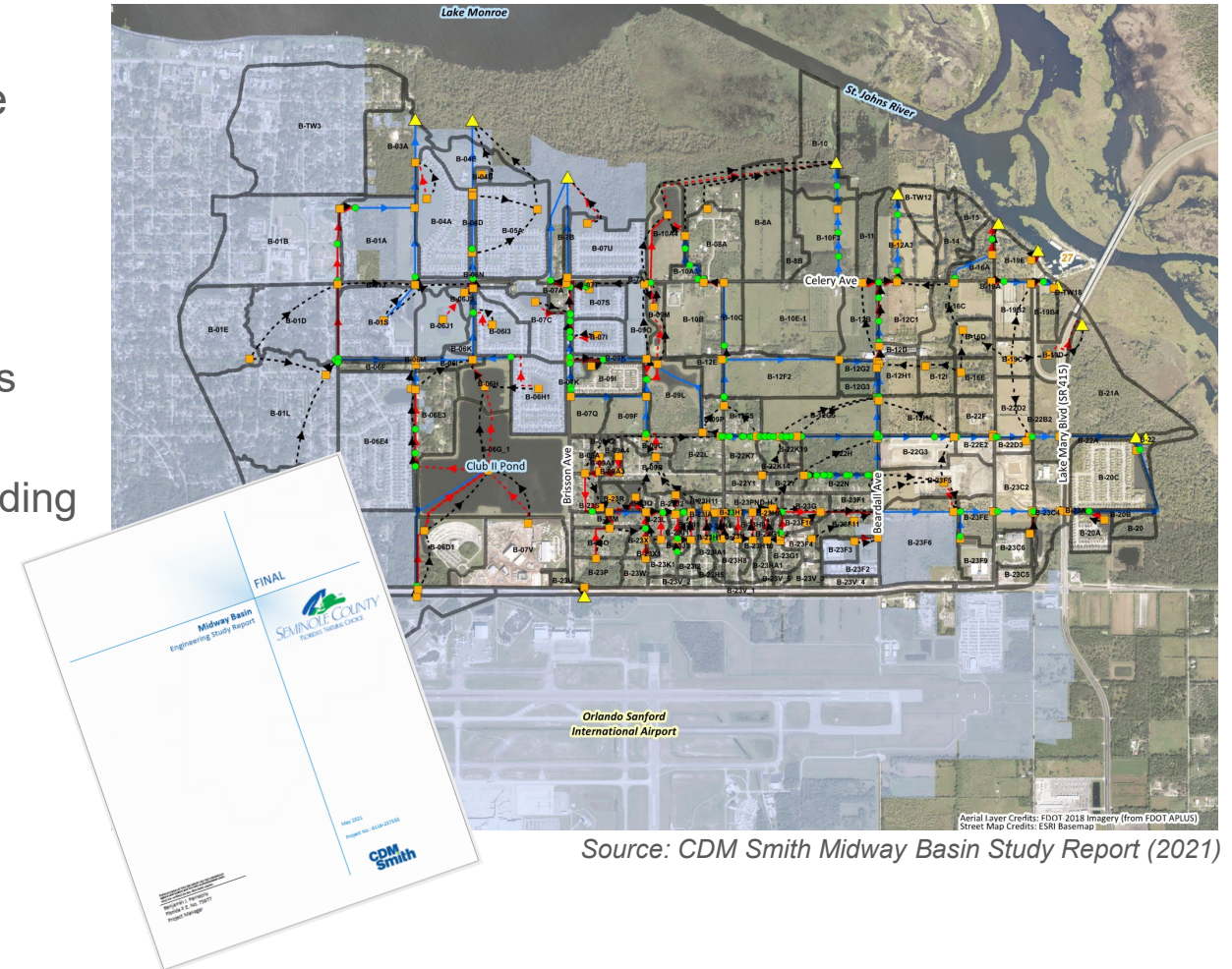
Source: CDM Smith Midway Basin Study Report (2021)

Midway Basin Study and Stormwater Model

The study included the ENTIRE basin but provided significant focus on the **unincorporated areas** of the watershed.

With that study, stormwater models of Existing and Future Conditions were created, that:

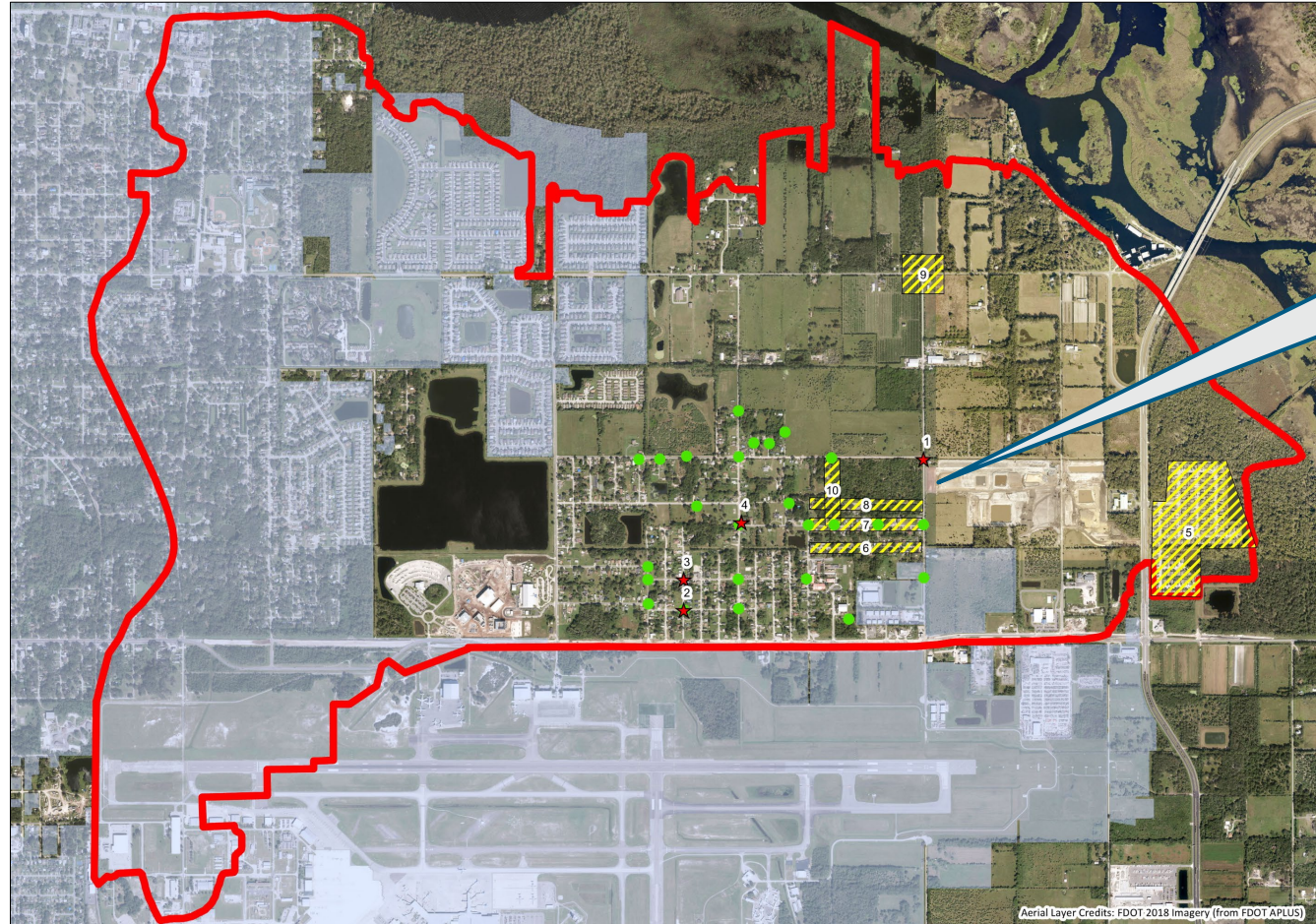
- Evaluated performance of existing drainage systems
- Identified and assessed flooding problems
- Developed conceptual improvements to reduce flooding (Level of Service Improvements)



Source: CDM Smith Midway Basin Study Report (2021)



Reported Problem Areas



Alleviating flooding in these areas is the focus of this project

Legend

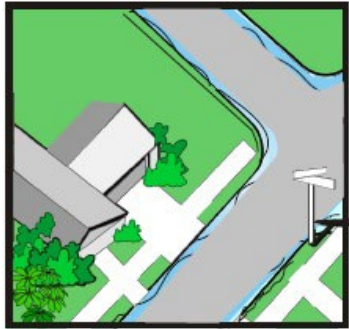
- Midway Basin
- City of Sanford
- 2019 Field Recon Problem Areas
- Locations Previously Identified by Residents*
- Flood Prone Areas (Identified in 2018 Stormwater Master Plan)

Source: CDM Smith Midway Basin Study Report (2021)



Level of Service Improvement Goal

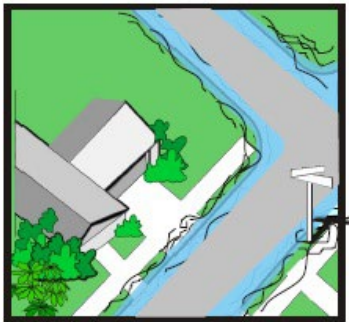
Goal to improve “C” or “D” community roadways to “A” or “B”



Service Level A
FLOW CONTAINED WITHIN SYSTEMS



Service Level C
WATER CONTAINED WITHIN FRONT YARD



Service Level B
WATER CONTAINED WITHIN RIGHT-OF-WAY



Service Level D
STRUCTURE FLOODING

Source: Seminole County Stormwater Master Plan (2018)

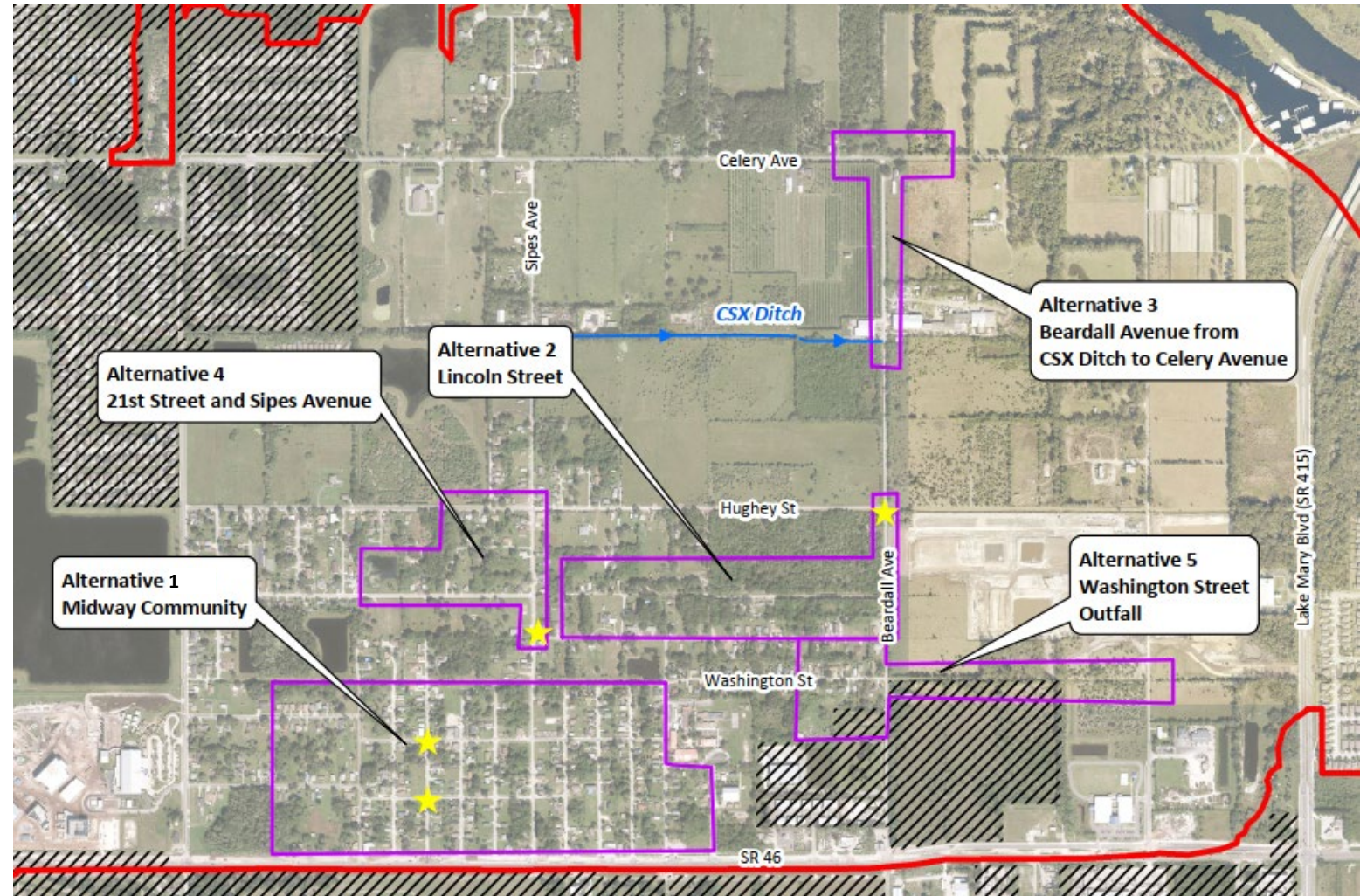
Recommended Flood Improvement Project Locations

The Midway Basin Study resulted in five (5) areas that were selected for development of drainage improvement concepts based on observed or reported flooding and validated by model results.

Included Alternative 1 through 5 (discussed in detail on next slides)

Goals:

- ❑ Improve flooding
- ❑ Provide public benefit



Source: CDM Smith Midway Basin Study Report (2021)

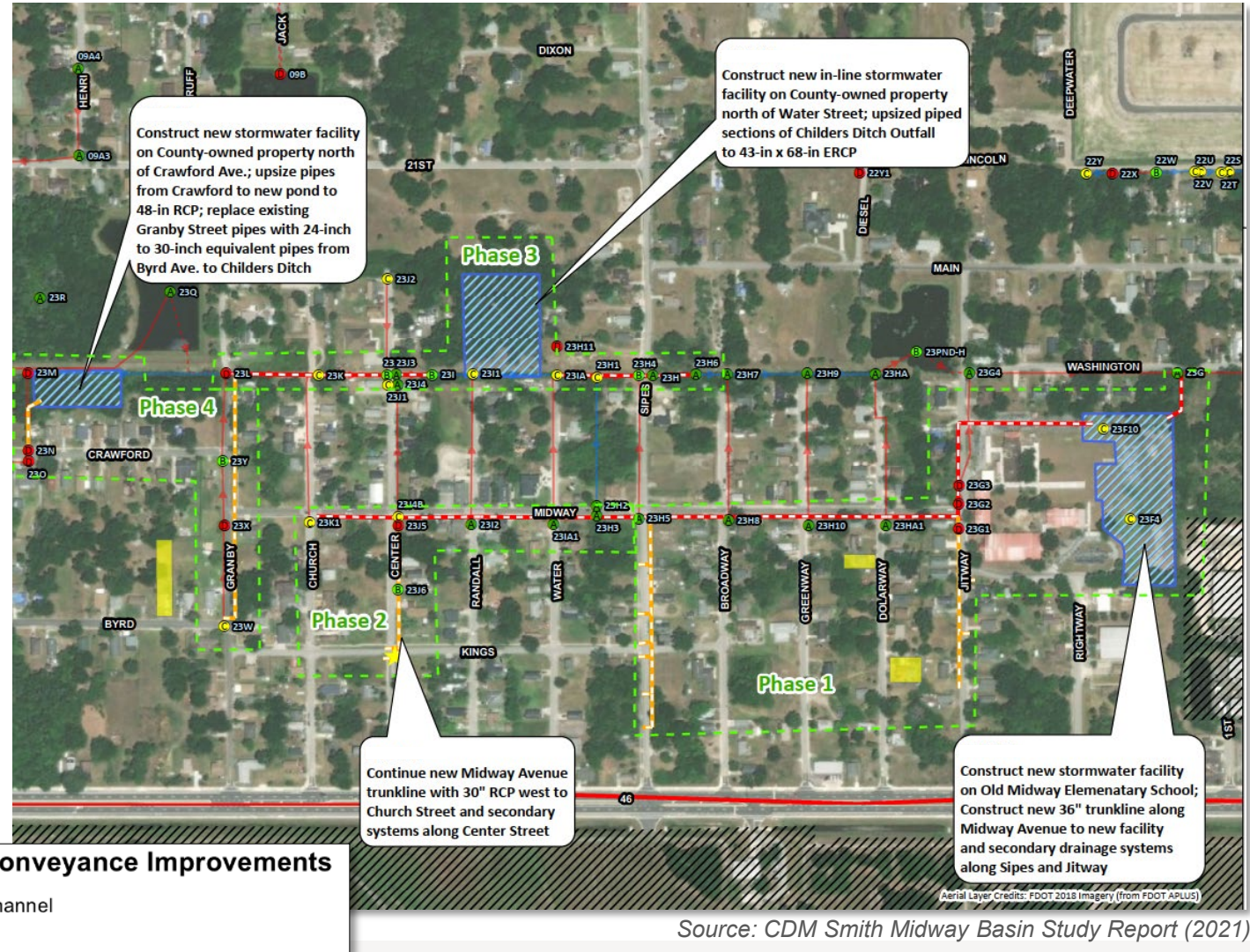
Study Alternative 1 Concept

Midway Community

- Frequent street flooding
- Limited conveyance capacity

Proposed Improvements

- Childers Ditch Conveyance
- Roadway drainage
- New stormwater ponds:
 - North of Water St
 - North of Crawford Ave
 - At Old Midway Elementary School



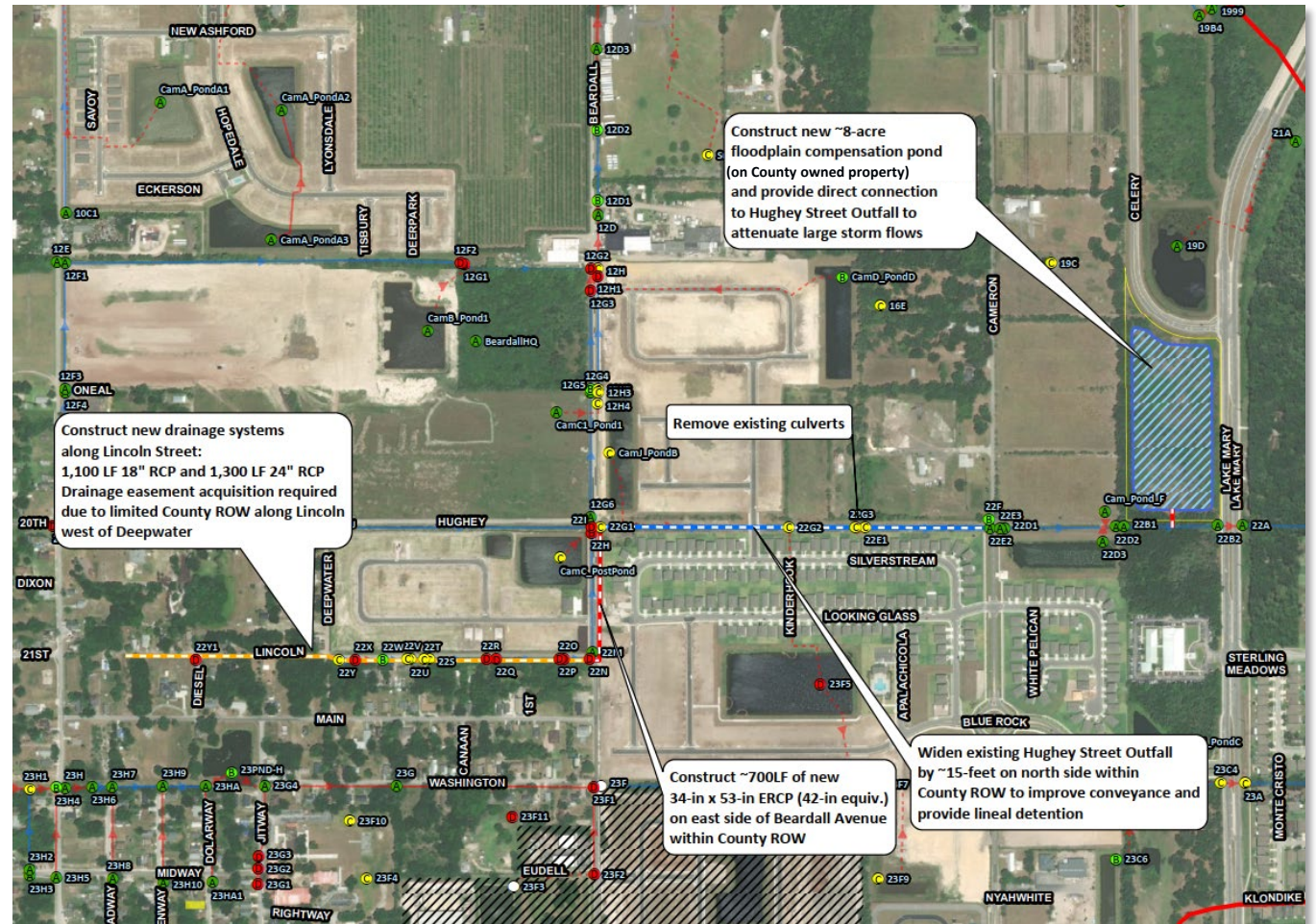
Study Alternative 2 Concept

Lincoln & Hughey Street

- ❑ Several Flood Complaints
- ❑ Lack of existing drainage system

Proposed Improvements

- ❑ Stormsewer and ditch improvements to Lincoln Ave
- ❑ Hughey Street ditch widening
- ❑ Stormwater pond west of Lake Mary Blvd.



Source: CDM Smith Midway Basin Study Report (2021)

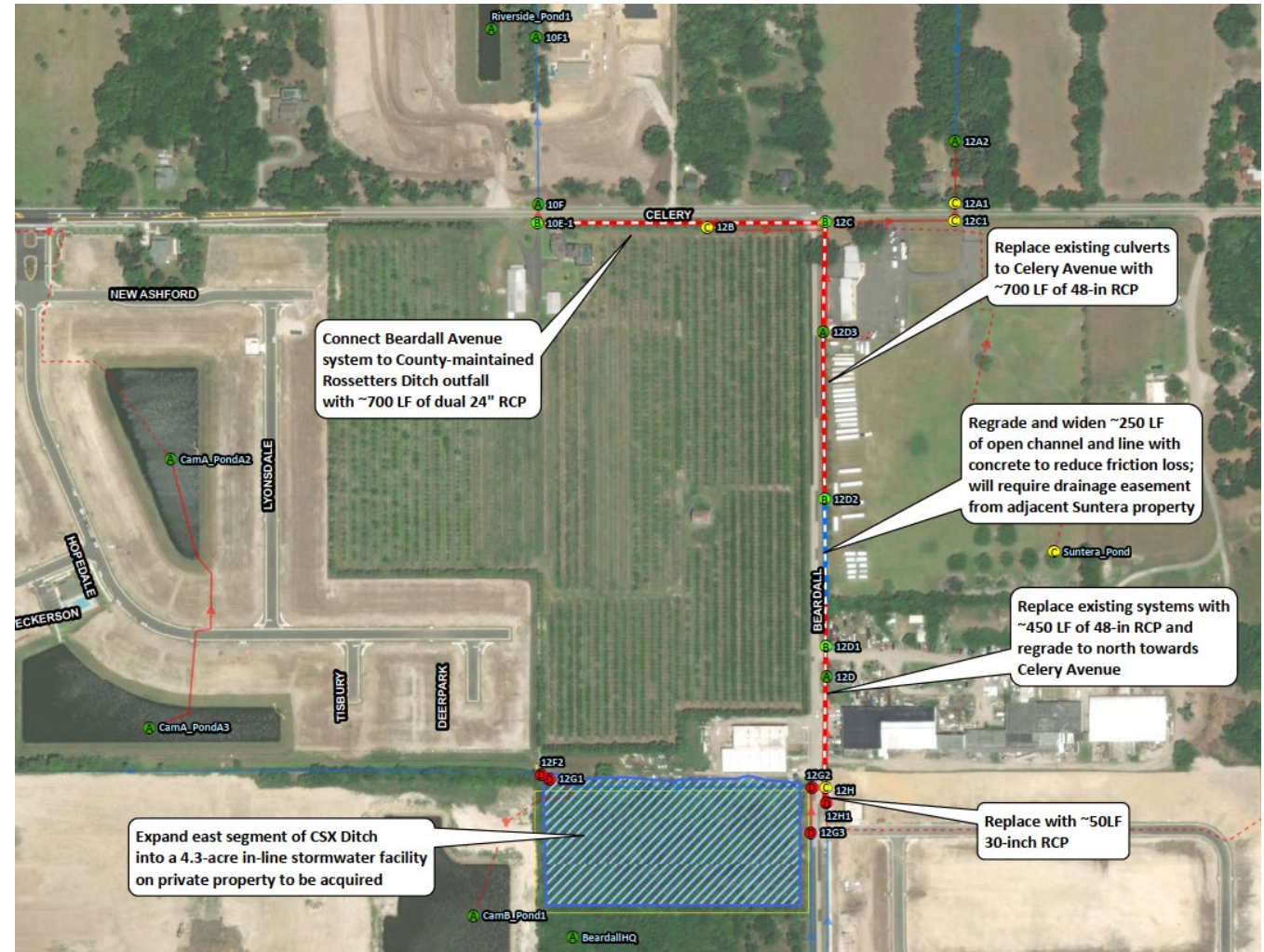
Study Alternative 3 Concept

Beardall Avenue & CSX Ditch

- ❑ Level of Service deficiency
- ❑ Limited conveyance capacity

Proposed Improvements

- ❑ Stormsewer upgrades
 - Beardall Ave.
 - Celery Ave.
- ❑ New pond along CSX ditch



Source: CDM Smith Midway Basin Study Report (2021)

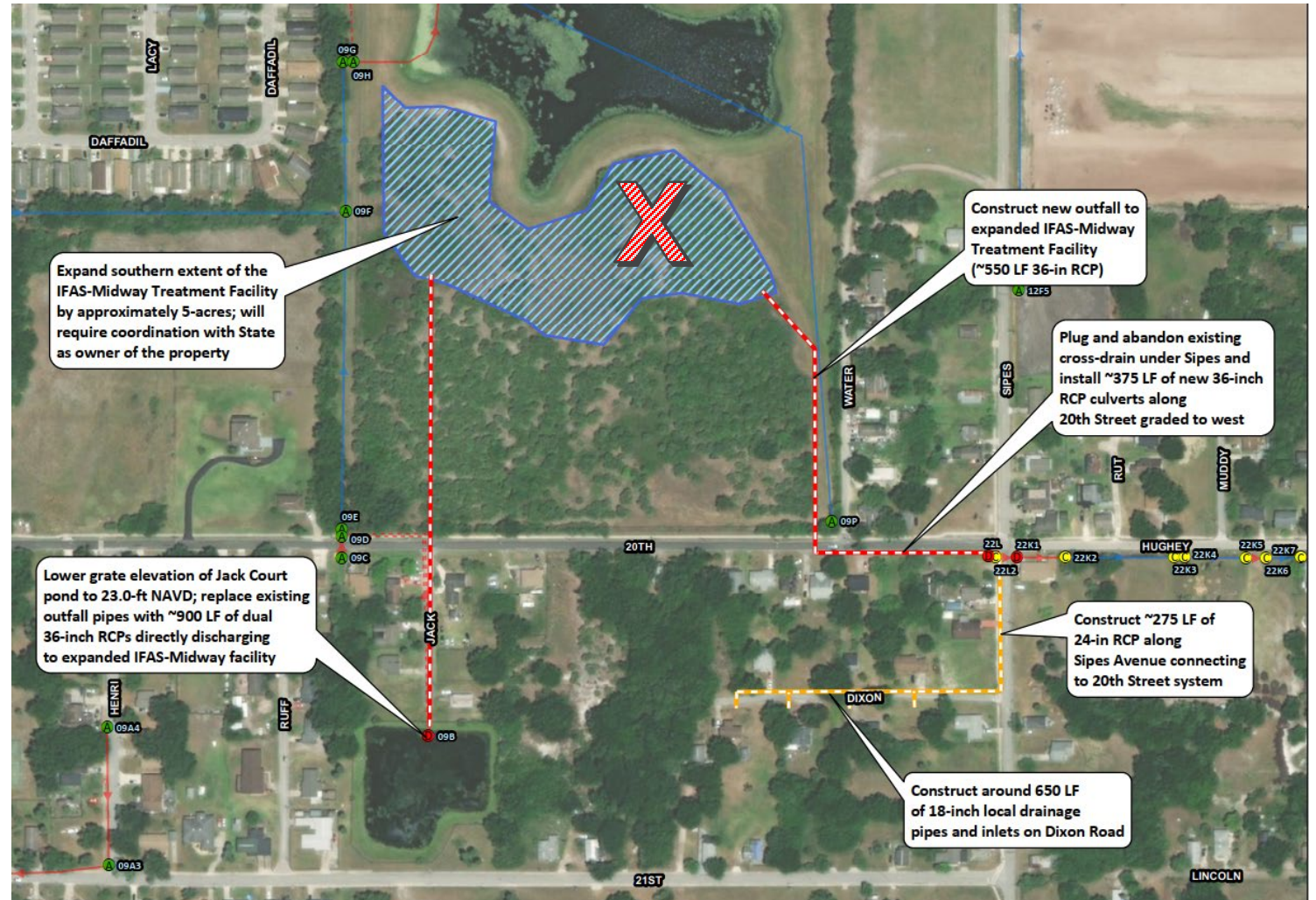
Study Alternative 4 Concept

20th Street and Sipes Avenue

- ❑ Resident flooding complaints
- ❑ Lack of drainage system on Dixon Ave.
- ❑ Existing IFAS pond improvements
(not required after additional analysis)

Proposed Improvements

- ❑ Connect Jack Court pond to IFAS pond to reduce flooding
- ❑ New drainage systems along Sipes and Dixon
- ❑ Re-route a portion of Hughey Street stormsewer to IFAS pond



Source: CDM Smith Midway Basin Study Report (2021)

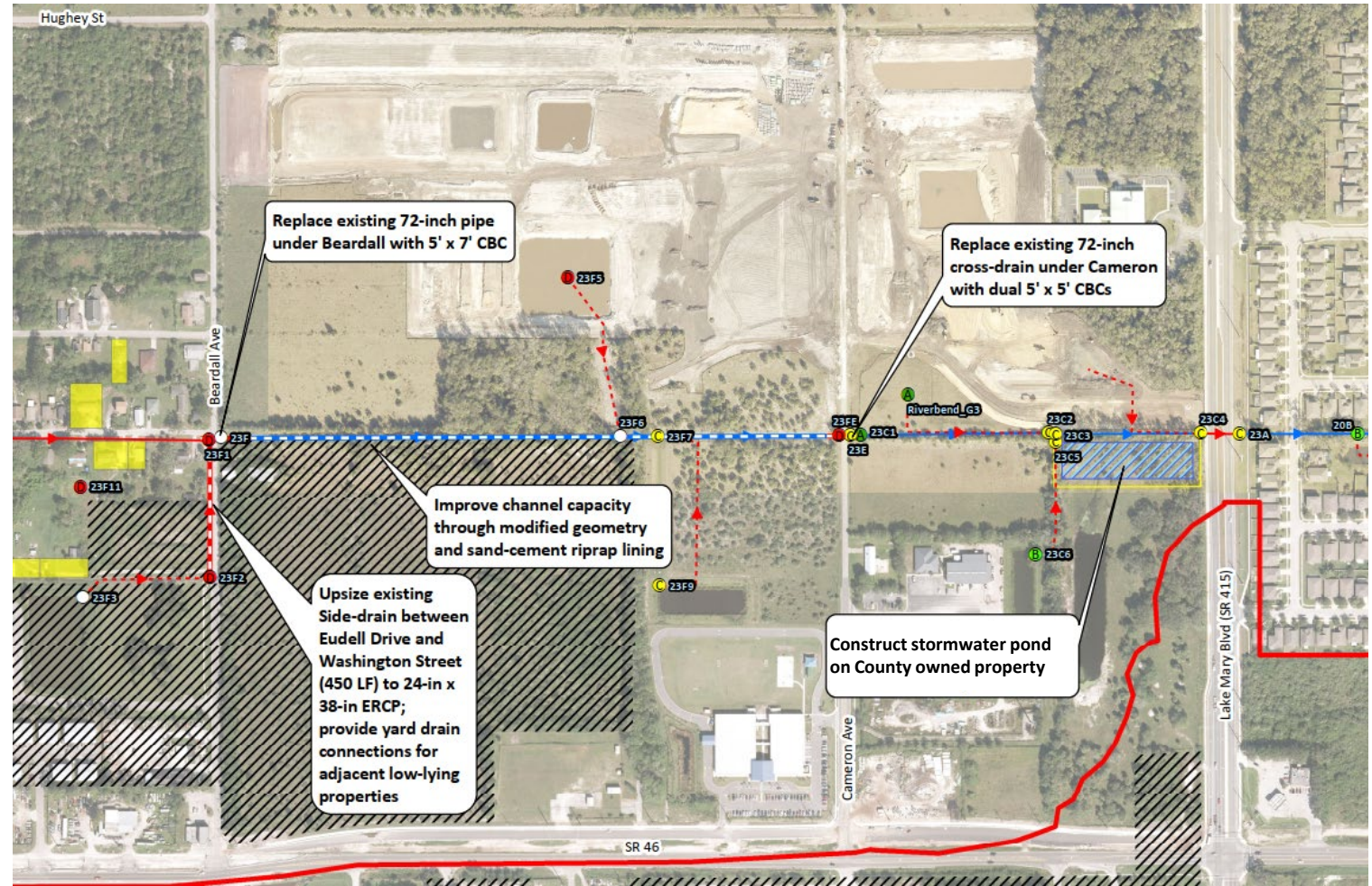
Study Alternative 5 Concept

Washington Street Outfall

- ❑ Resident flood complaints
- ❑ Limited conveyance capacity and storage

Proposed Improvements

- ❑ Increase capacity of Washington Street Outfall Ditch
- ❑ Upsize culverts at Apalachicola and Cameron Ave.
- ❑ New Pond at Lake Mary Blvd.



Source: CDM Smith Midway Basin Study Report (2021)

Current Project Goals



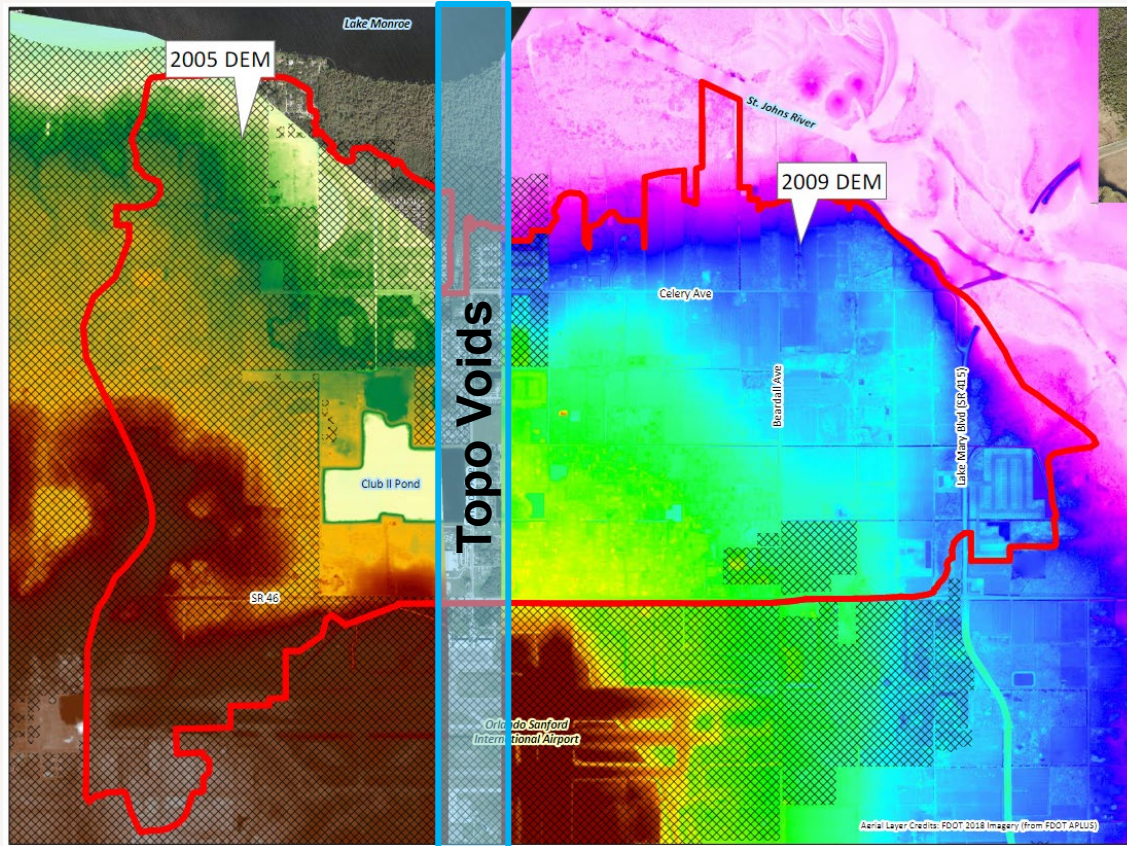
Project Goals

1. Update watershed model to incorporate new high resolution aerial survey, ground survey, and proposed improvements
2. Design and prepare construction plan for the Alternative Concepts recommended by Midway Basin Study
3. Improving Level of Service for implemented alternatives

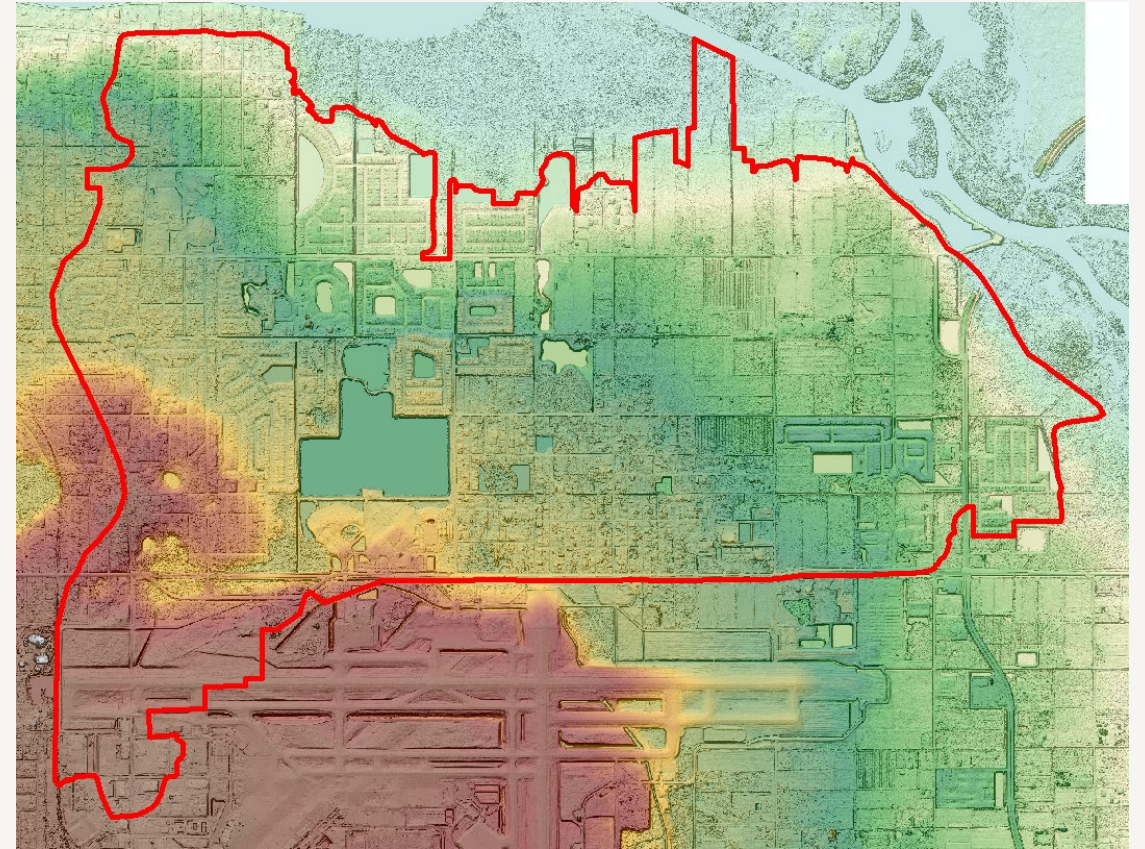


Midway Basin Drainage Improvements Project Description

Watershed Model Update – New Aerial Survey



Midway Basin Study Aerial Survey



**“High Resolution” 2019 Aerial Survey
Used for Model Update**

Watershed Model Update – Increased Model Detail

- ❑ Significant increase in level of detail
- ❑ Along with the “High Resolution” survey the updated model provides high confidence in the model results

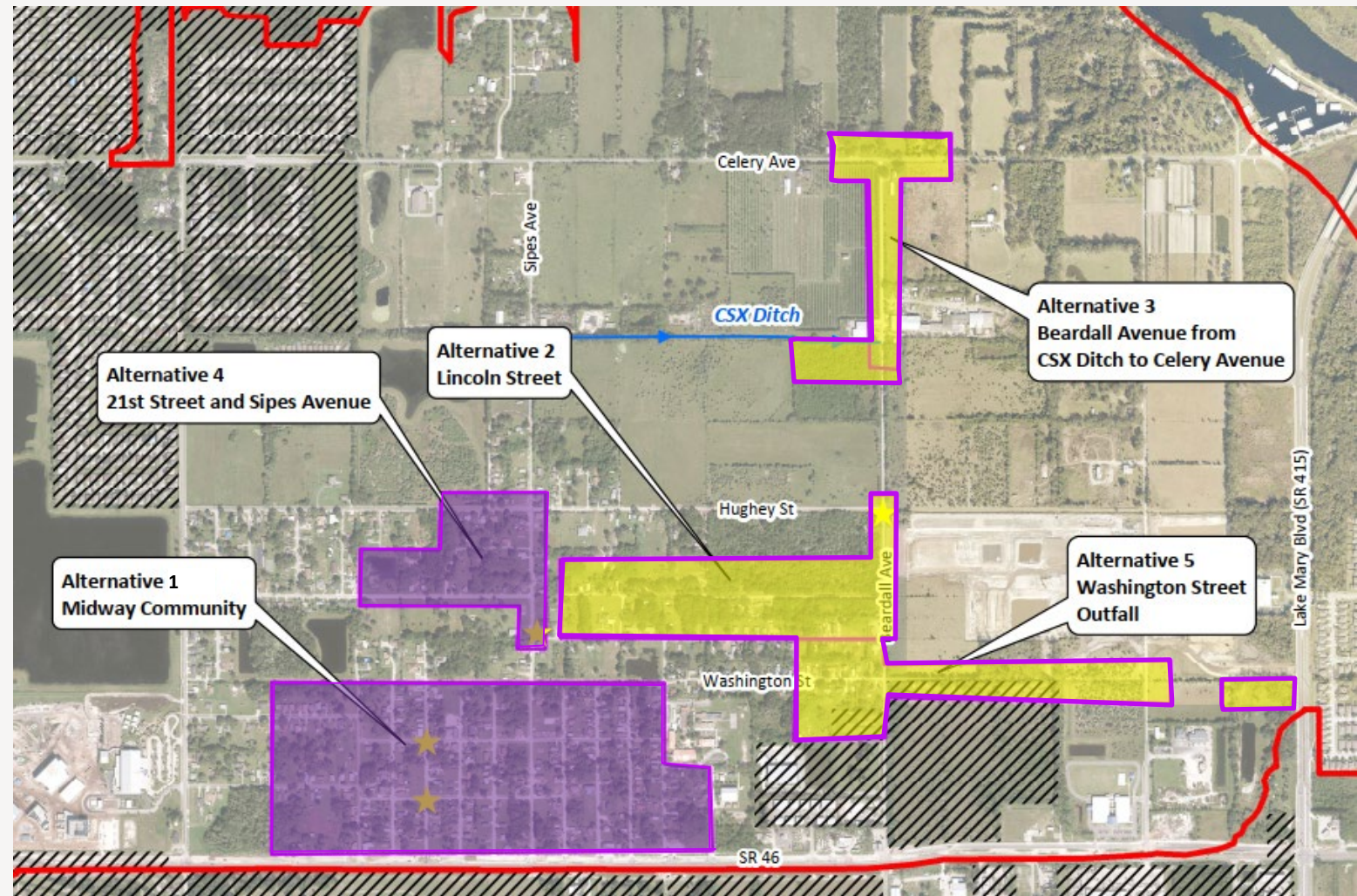


Recommended Flood Improvement Project Locations

The Basin Study resulted in five areas for improvement (Alternatives 1-5)

These areas were combined into two bid packages (or sets of plans)

- ❑ Bid Package 1 (Purple)
 - Alternative 1 and 4
- ❑ Bid Package 2 (Yellow)
 - Alternative 2, 3 and 5



Source: CDM Smith Midway Basin Study Report (2021)

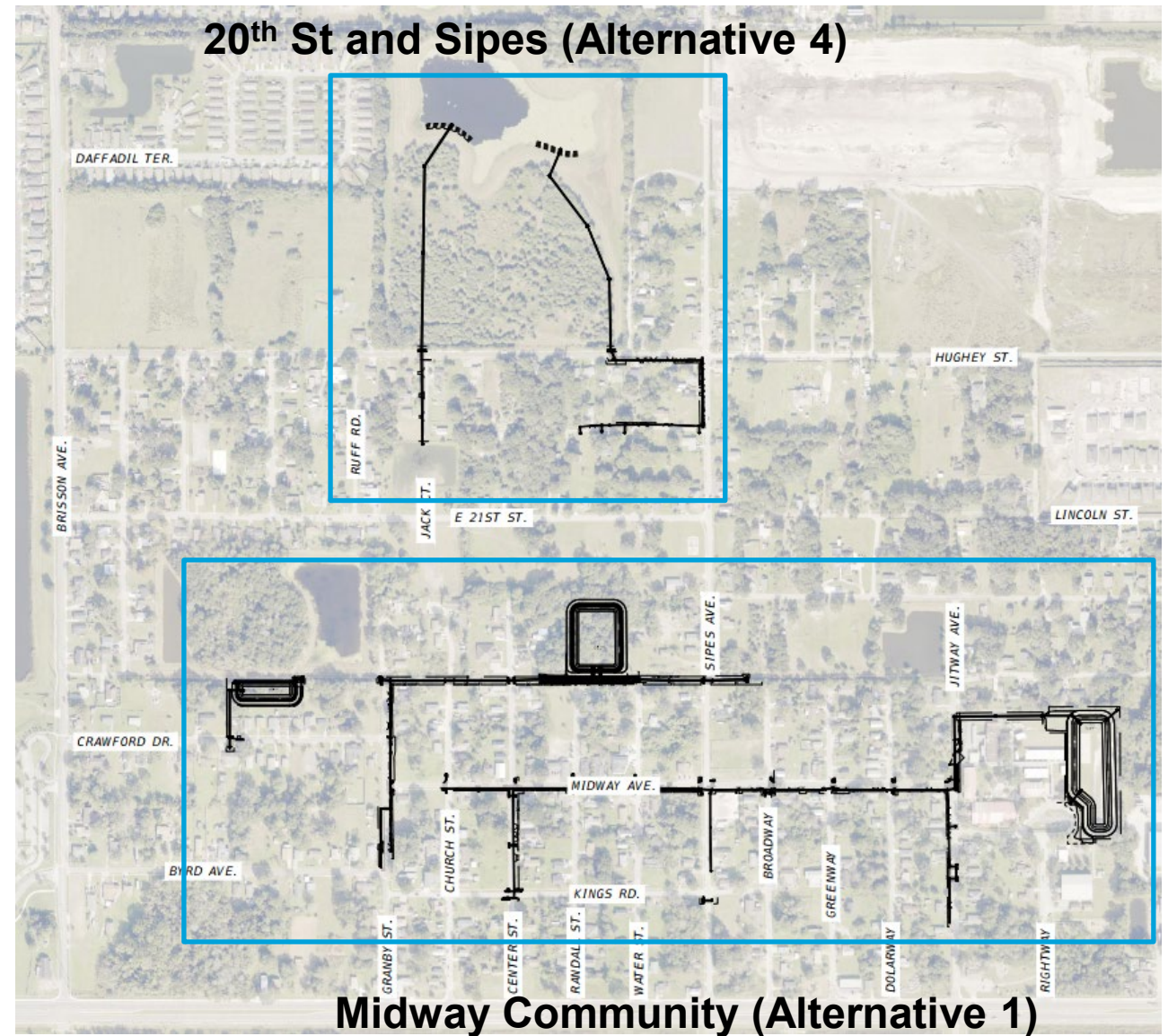
Bid Package 1

Midway Community (Alternative 1)

- ❑ Re-grade Childer's Ditch to increase capacity
- ❑ 3 proposed stormwater ponds
- ❑ Improvements to existing stormsewer systems

20th Street and Sipes Avenue (Alternative 4)

- ❑ New stormsewer on Dixon Ave
- ❑ Re-route portion of Sipes Ave. stormsewer that went to Hughey St to new outfall to IFAS pond
- ❑ Modify control structure at Jack Court Pond to lower water elevation (and provide more flood storage)
- x Further analysis found that IFAS pond contains sufficient capacity and did not require expansion



Bid Package 2

Lincoln and Hughey (Alternative 2)

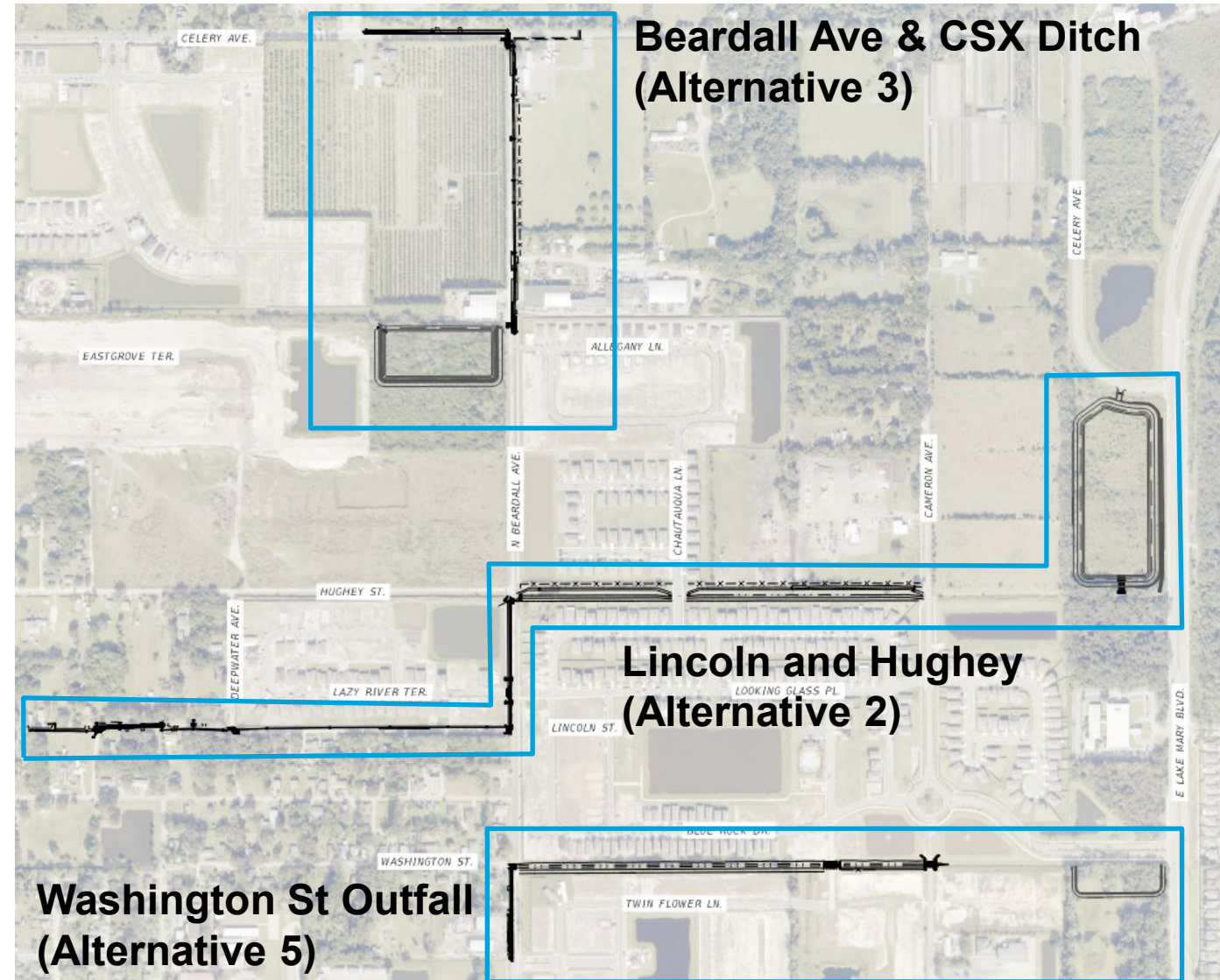
- ❑ New stormsewer and ditches along Lincoln St
- ❑ Upsize existing stormsewer on Beardall Ave
- ❑ Widen Hughey St ditch and connect to new pond along Lake Mary Blvd.

Beardall Ave & CSX Ditch (Alternate 3)

- ❑ New pond on Beardall Ave at CSX ditch
- ❑ Upsize existing stormsewer and replace large roadside ditch with new stormsewer
- ❑ New stormsewer outfall on N. Celery Ave

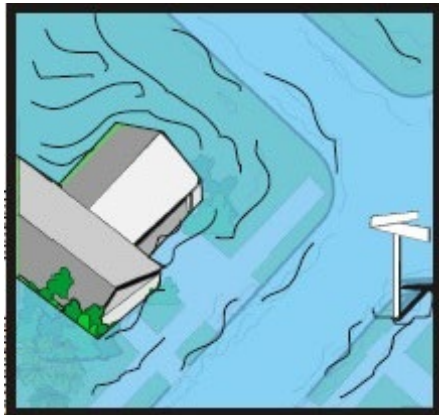
Washington St Outfall (Alternative 5)

- ❑ Widen and line Washington St Outfall ditch and upsize culverts at Apalachicola and Cameron
- ❑ New pond west of Lake Mary Blvd

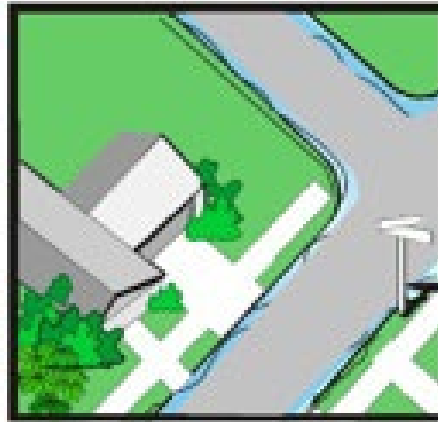
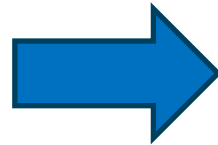




Improvements – Bid Package 1



LOS D



LOS A

-or-



LOS B

Midway Community (Alternative 1)

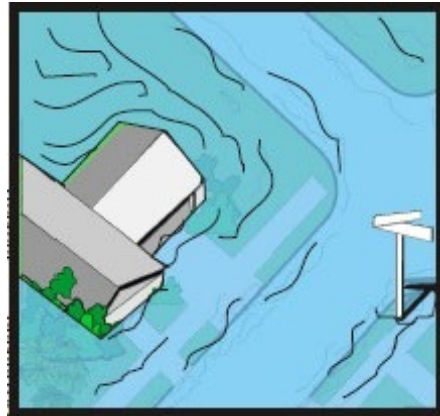
Flooding reduced by over a 1-foot for the 10-year storm

20th Street and Sipes Avenue (Alternative 4)

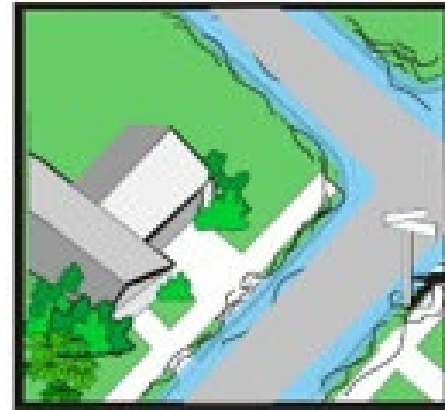
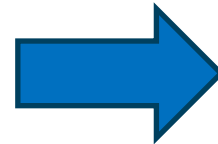
Flooding reduced by almost a 1-foot for the 25-year storm



Improvements – Bid Package 2



LOS D



LOS B

-or-



LOS C

Lincoln and Hughey (Alternative 2)

Flooding reduced by over
1-foot for the 10-yr storm

Beardall Ave & CSX Ditch (Alternative 3)

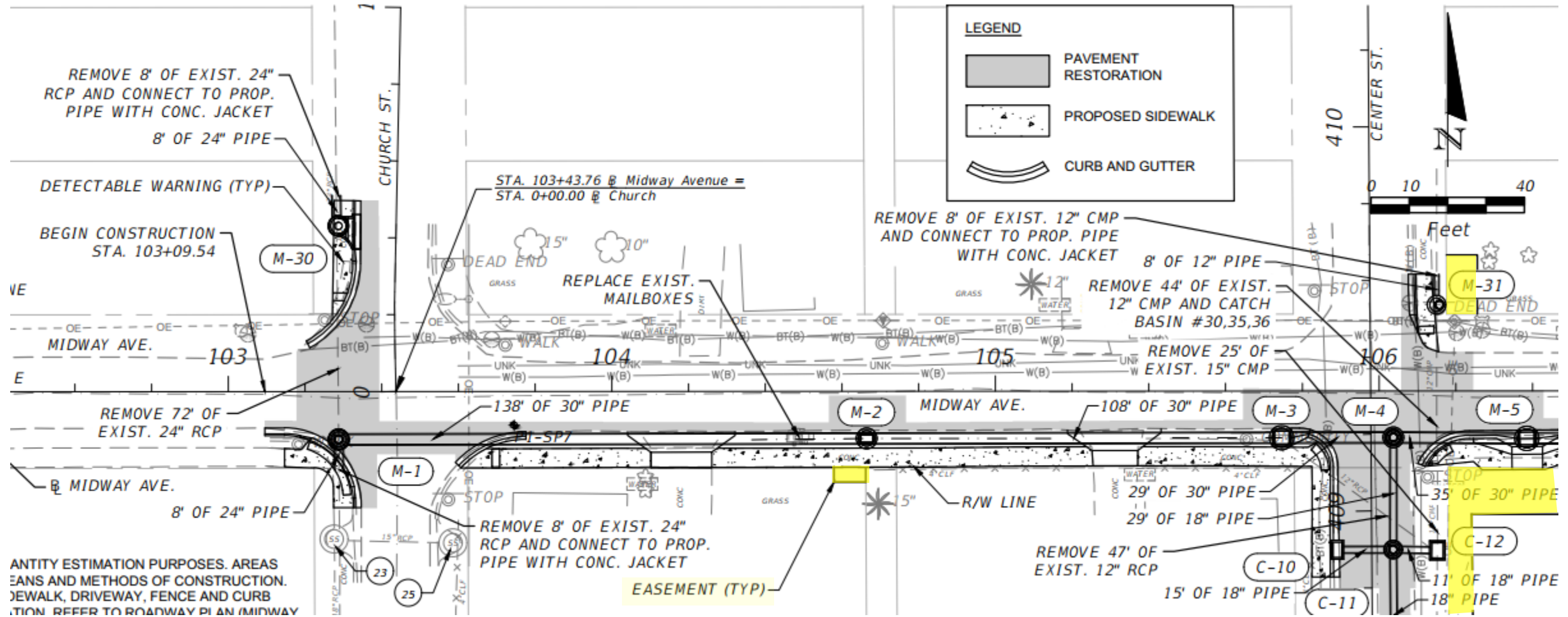
Flooding reduced by over
0.5-feet for the 25-yr storm

Washington St Outfall (Alternative 5)

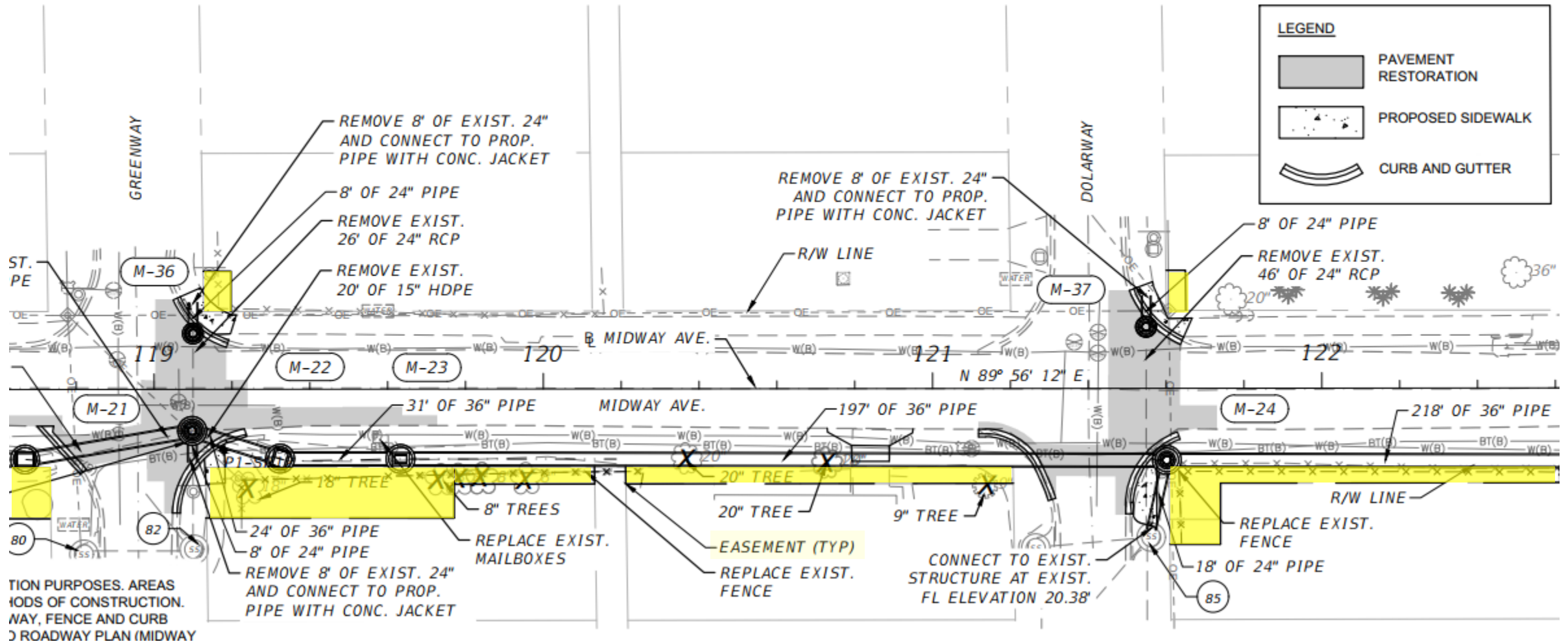
Flooding reduced by a
1-foot for the 25-yr storm

Easement Needs

Easement Needs

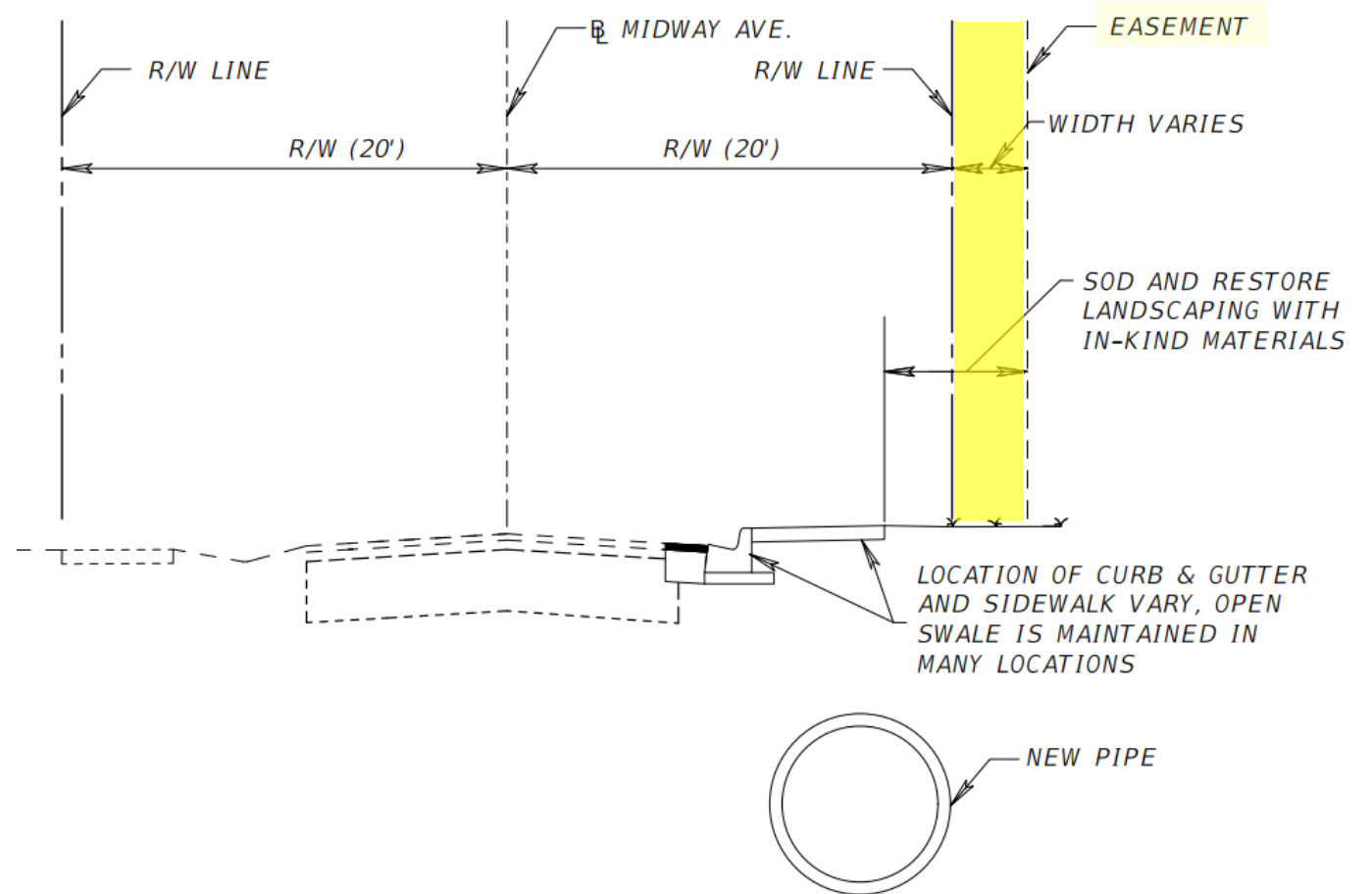


Easement Needs



Easement Needs

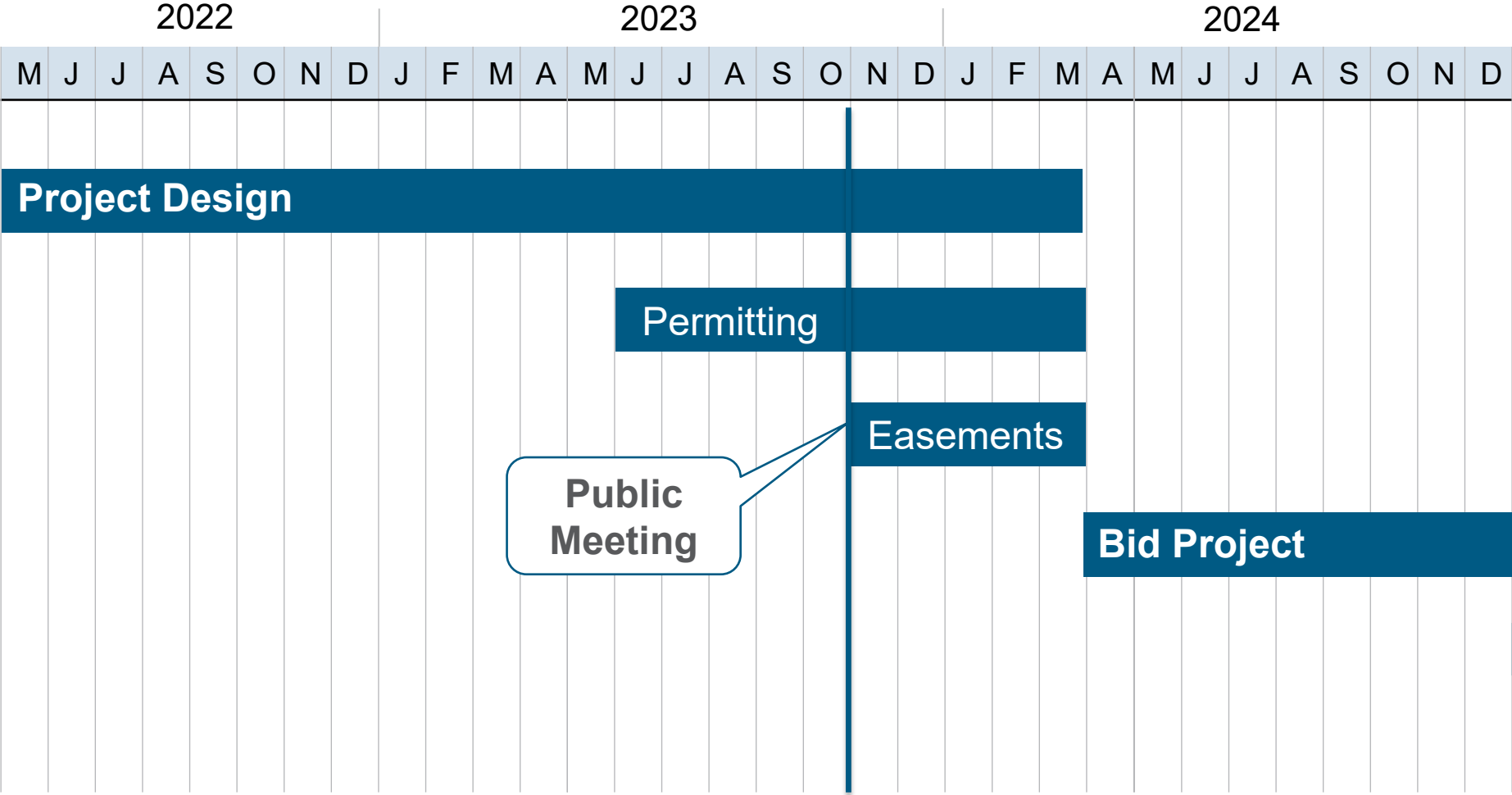
- ❑ Limited County Right-of-Way (R/W)
- ❑ Design maximizes the existing R/W
- ❑ Where it is restricted, temporary or permanent easements are necessary to construct the improvements
- ❑ An easement is not a purchase of the property, it just provides the County the right to build and maintain the improvements
- ❑ Impacted landscaping and fences will be restored in-kind



Schedule



Schedule



We need your help to build this project.

Without your easements all of the improvements cannot be made.



Feedback



Community Feedback



E-mail / Phone



- Subject: Midway Basin Drainage Improvements – Public Feedback
 - Director of Public Works, Jean Jreij, PE
jjreij@seminolecountyfl.gov
Ph: 407-665-5601
 - Seminole County Project Manager, Jeff Sloman, PE
jsloman@seminolecountyfl.gov
Ph: 407-665-5572



US Mail

- Seminole County Public Works – Engineering Division
Re: Midway Basin Drainage Improvements , Public Feedback
100 East 1st Street, Sanford, FL 32771



THANK YOU