Project Development and Environment Re-evaluation Study

Final Technical Memorandum

SR 426 / CR 419 from Pine Avenue to Avenue B

Oviedo, Florida

FPID: 415030-1-38-01

Prepared for

Seminole County

Prepared by

Inwood Consulting Engineers

April 2011

TABLE OF CONTENTS

LIST OF FIGURES **PAGE**

LIST OF TABLES **PAGE**

1.0 INTRODUCTION

1.1 Background

The City of Oviedo, in conjunction with Seminole County and the Florida Department of Transportation (FDOT), completed a Project Development and Environment (PD&E) Study in June 2007 for SR 426 and CR 419 from Pine Avenue to Lockwood Boulevard, a distance of about three miles. The study recommendations are documented in the "*Project Development and Environment Study Preliminary Engineering Report"*, prepared by DRMP (May 2007). The recommendations include

- Widening SR 426 and CR 419 from the existing two-lane rural undivided roadway to a four-lane urban divided facility within the project limits;

- Realigning CR 426 to the east from its current intersection with CR 419 (See Appendix 1); and

- Adding one additional through lane on SR 434 in each direction at the intersection with SR 426 (See Appendix 1).

After receiving an approval from the Federal Highway Administration (FHWA) of the recommendations in the PD&E study, the project moved forward to the design phase, which started in October 2007. However, due to budget constraints, this project was divided into the following three phases. Currently only Phase 1 of the project is under design.

Phase 1 – SR 434 additional through lanes, CR 426 realignment, and the associated CR 419 miscellaneous widening (See Appendix 2 for the original Phase 1 limits)

Phase 2 – SR 426 / CR 419 widening from Pine Avenue to Avenue B

Phase 3 – CR 419 widening from Avenue B to west of Lockwood Boulevard

1.2 Previous PD&E Re-Evaluation

A previous PD&E Re-evaluation was prepared at the beginning of Phase 1 for the revised pond sites and the alignment options on SR 434 as described below:

Pond Siting Report Update

At the beginning of the Phase 1 design, an updated pond siting analysis was conducted by reviewing the current and past information collected from numerous sources, including the recommended pond sites as documented in the "*Location Hydraulics / Pond Siting Report*" prepared by DRMP (August 2005) as part of the original PD&E Study.

This updated pond analysis recommended alternate preferred pond sites than the ones in the original PD&E based on the current criteria and the evaluation of wetland impacts and right of way costs. The study results and recommendations are documented in "*Pond Siting Report – SR 426/CR 419 Widening from Pine Avenue to*

Avenue B" dated January 2009. This report also includes the assessment of contamination, environment, and cultural resources for the updated pond sites.

All property owners who would be impacted by the updated pond sites were notified. In addition, a public information meeting was held in February 2009 to present the 60% plans, including the updated pond sites.

SR 434 Alignment

The original PD&E recommended a center widening on SR 434 to provide one additional through lane in each direction at the intersection with SR 426. During the design of Phase 1, left widening alignment, center widening alignment, and right widening alignment were evaluated to determine the best option that would minimize the impacts to the community and the environment with the lowest overall costs. As part of this evaluation, additional contamination screenings were also conducted. Based on this evaluation as included in Appendix 3, the right widening alignment was recommended as the preferred alternative. The study results were presented at a public alignment evaluation meeting on April 10, 2008 to the property/business owners along SR 434. No property owners raised any concerns about the preferred alternative.

Based on the results of the updated Pond Siting Report and SR 434 alignment evaluation, it was determined that no substantial changes have occurred in the social, economic, or environmental effects of the proposed changes that would significantly affect the quality of human environment. The FHWA concurred with the re-evaluation in September 2009 and the project moved forward with the recommendations (See Appendix 4).

1.3 Design Modification after the Public Information Meeting

Per the recommendation from the original PD&E and due to the budget constraints for this project, the 60% construction plans that were presented at the public information meeting showed that the widening on SR 434 would end at about 250 feet south of Franklin Street. The proposed bicycle lane and the 8-foot sidewalk would also terminate at this location. After further discussion with Seminole County and the City of Oviedo in regard to providing a better connection to the existing bicycle trail network in downtown Oviedo, it was concluded that the Phase 1 project limits are to be expanded to continue the proposed bicycle lane and the sidewalk to Franklin Street along the east side of SR 434 and connect to the existing sidewalk on the south side of Franklin Street (See Appendix 5).

A cultural Resource Assessment Survey (See Appendix 6) was conducted and wetland impact was reviewed for the proposed extension of the sidewalk and the bicycle lane. The results showed that there were no environmental or social impacts from the proposed extension. Therefore, the proposed extension of the sidewalk and the bicycle lane was added in the 90% plans.

1.4 Current PD&E Re-Evaluation

During the Phase 1 design, on-going contamination testing was conducted on the approved pond sites to define the limits for contamination clean-up and/or removal. However, new contamination was found on the approved pond sites and its limits were unable to be defined.

Through several discussions and coordination with the City of Oviedo, Seminole County, and FDOT, it was determined to investigate alternate pond sites and eliminate the proposed CR 426 realignment to avoid the newly found contamination.

1.5 Purpose of Study

This technical memorandum has been prepared to document all the tasks conducted and the recommendations as part of the current PD&E Re-evaluation Study for SR 426 / CR 419 widening from Pine Avenue to west of Lockwood Boulevard.

The PD&E Re-evaluation includes the following tasks:

- Evaluate the traffic impacts to the street network in downtown Oviedo due to the elimination of the proposed CR 426 realignment.
- Investigate and evaluate alternate pond sites to replace the currently proposed pond sites. The evaluation is to include environmental impacts, contamination screening and assessment, and a Cultural Resource Assessment Survey.

This technical memorandum will assist the City of Oviedo, Seminole County, FDOT, and FHWA in selecting a recommended alternative and serve as the document in support of the subsequent engineering decisions through design and construction.

2.0 TRAFFIC

The information in this section was extracted from the "*SR 426 / CR 419 Traffic Analysis and Simulation Study*" prepared by GMB (September 2010). Please refer to the study report for more detailed traffic data, traffic projection, and analysis. The traffic analysis evaluated the following three phases of the project:

Phase 1A – Evaluate the operations of the existing downtown street network for converting the existing one-way pair operations on SR 434 to two-lane two-way operations for the Year 2010 design traffic. No widening is included in this analysis. This evaluation is to support the City's request for FDOT to include this conversion in FDOT's upcoming resurfacing project.

Phase 1 – Evaluate the operations of the downtown street network for the Year 2010 design traffic with the proposed SR 434 widening, but without the CR 426 realignment.

PD&E Re-eval – Re-evaluate the PD&E phase of the entire study corridor for the Year 2010 and Design Year 2030 design traffic condition without the CR 426 realignment.

2.1 Phase 1A

The Phase 1A analysis includes a No-Build scenario for Year 2010 as shown in Figure1, and two Build Scenarios, as shown in Figure2 and Figure 3. The only difference between the two Build Scenarios is that the southbound left turn movement at the SR 434 and SR 426 intersection is prohibited in Scenario 2. This left turn traffic will be rerouted through Franklin Street and Oviedo Boulevard back to CR 419.

A comparative LOS analysis of the Measure of Effectiveness (MOE) was conducted between the three scenarios as shown in Table 1 and Table 2 for the AM and PM Design Hour. Based on these tables, both Scenario 1 and Scenario 2 would operate at a better LOS conditions compared to the No-Build Scenario. In addition, Scenario 2 would operate slightly better than Scenario 1.

In conclusion, this study result would support the City's request for FDOT to include the conversion of SR 434 to two-lane two-way operations in FDOT's upcoming resurfacing project.

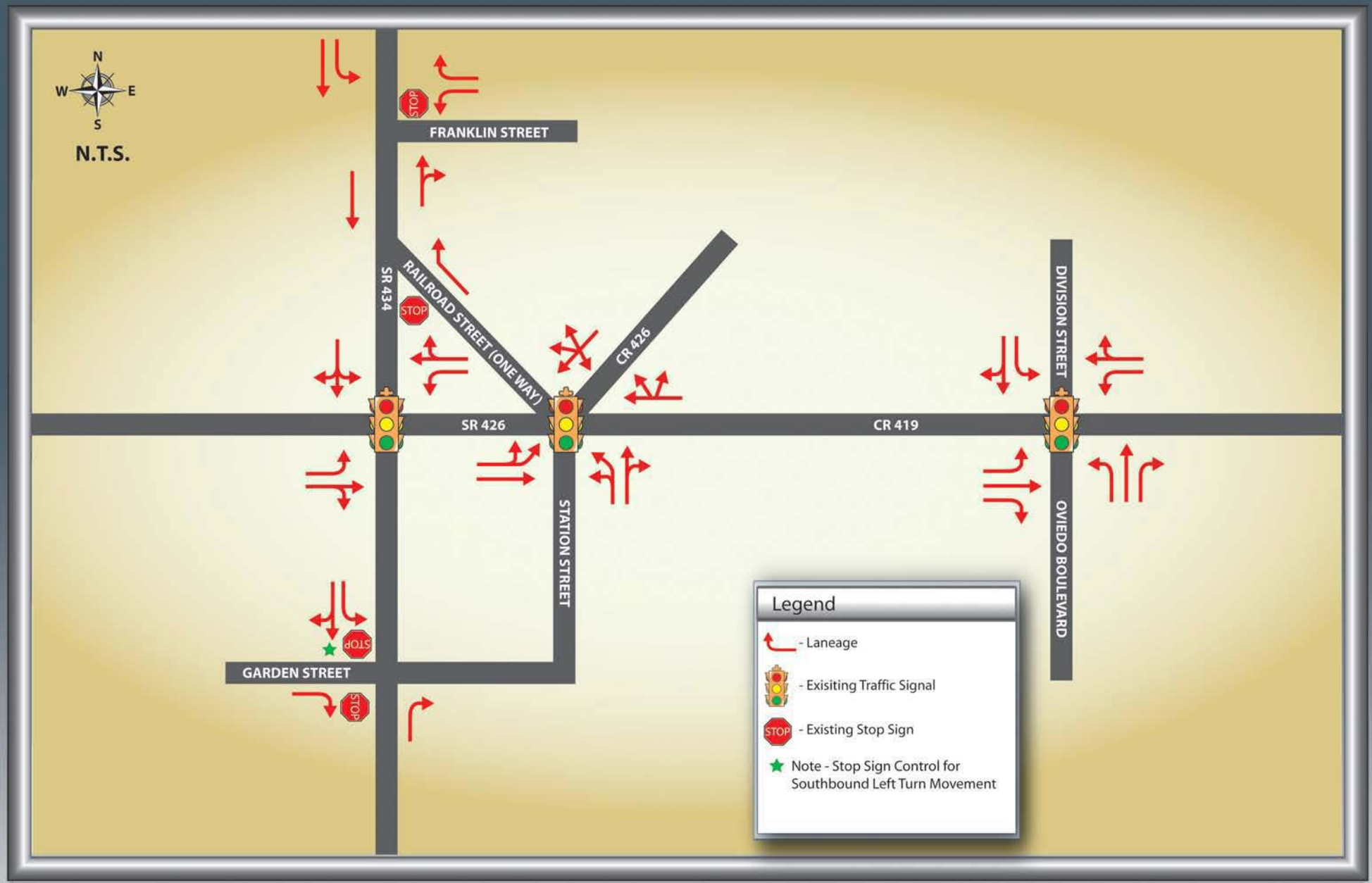
2.2 Phase 1

The Phase 1 analysis includes a No-Build scenario for Year 2010 as shown in Figure1, and one Build scenario (without the CR 426 realignment) as shown in Figure 4. This Build Scenario is similar to Phase 1A Build Scenario 1 in Section 2.1, with the exception that Phase 1 Build scenario has four lanes along SR 434. This analysis also compared the MOEs with the original Phase 1 Build Scenario, which includes the CR 426 realignment.

A comparative LOS and SYNCHRO control delay analysis was conducted between the three scenarios as shown in Table 3 for the AM and PM Design Hour. Based on this table, both the

Date Created: 9/10/2010

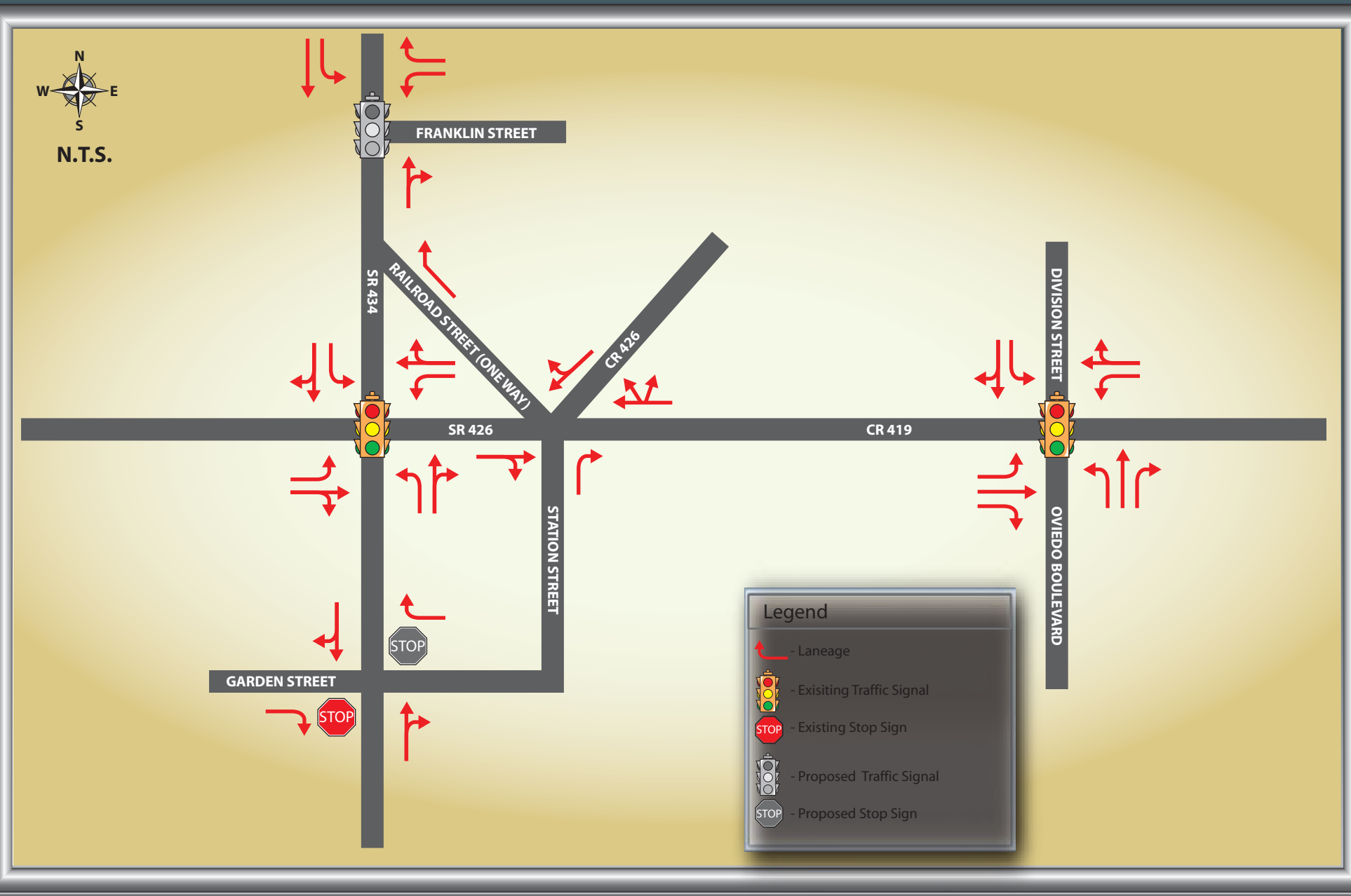
Project Number: 07-106.05



Prepared for: Seminole County
Prepared with: Inwood Consulting Engineers
Prepared by: GMB Engineers & Planners, Inc.

SR 426 / CR 419
Design Traffic and Simulation Study
Phase 1A

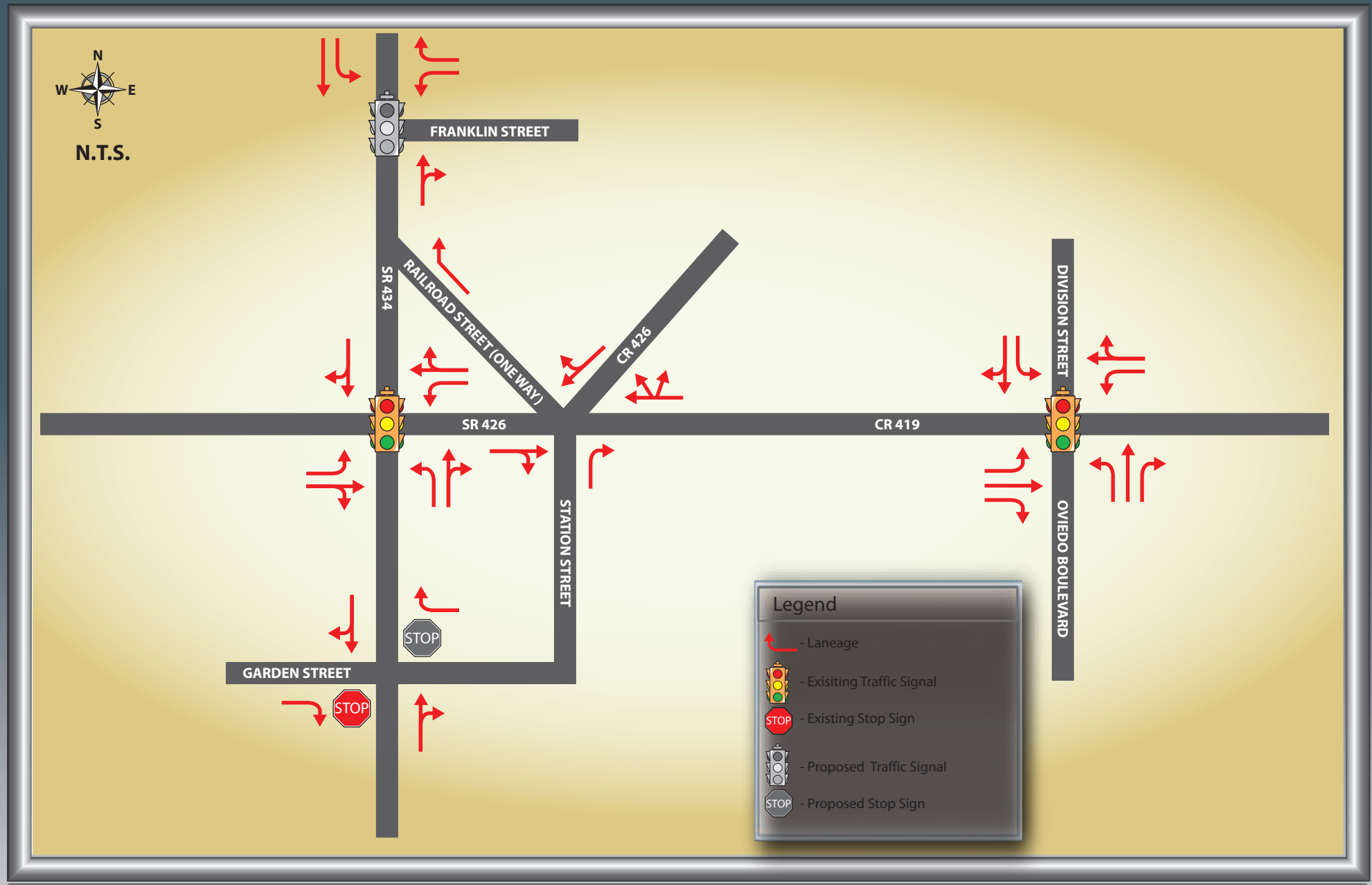
Figure 1
Year 2010 No Build Geometry



Prepared for: Seminole County
Prepared with: Inwood Consulting Engineers
Prepared by: GMB Engineers & Planners, Inc.

SR 426 / CR 419
Design Traffic and Simulation Study
Phase 1A

Figure 2
Year 2010 Proposed Build Geometry
Scenario 1



Prepared for: Seminole County
Prepared with: Inwood Consulting Engineers
Prepared by: GMB Engineers & Planners, Inc.

SR 426 / CR 419
Design Traffic and Simulation Study
Phase 1A

Figure 3
Year 2010 Proposed Build Geometry
Scenario 2

TABLE 1

Year 2010 AM Design Hour Intersection LOS Analysis Results Comparison for Phase 1A

Intersection	No-Build Scenario			Build Scenario-1			Build Scenario-2		
	Delay (sec)	LOS	Maximum V/C Ratio	Delay (sec)	LOS	Maximum V/C Ratio	Delay (sec)	LOS	Maximum V/C Ratio
SR 426/ CR 419 @									
SR 434~	375.3	F	2.21	79.3	E	1.14	75.6	E	1.16
Station Street/CR 426[$]	212.1	F	1.44	NAV	NAV	NAV	NAV	NAV	NAV
Division Street/Oviedo Boulevard~	57.3	E	1.08	70.2	E	1.27	69.9	E	1.07
SR 434/ Central Avenue @									
Garden Street/ Station Street*	7.3/15.5	A/C	0.49	0.0/14.2	A/B	0.46	0.0/14.4	A/B	0.46
Franklin Street*[@]	10.2/656.4	B/F	2.37	14.8	B	0.84	17.7	B	0.84

Notes:

1. Intersection LOS and Delay are reported for signalized intersections. In the case of unsignalized intersections, the delay and LOS are reported for major street turn movement /minor street (worst case).

2. No Build Scenario maintains the existing geomtery at the study intersections.

3. SB left turn movement is prohibited in Build Scenario 2 at SR 426/CR 419 and SR 434

4. NAV stands for Not Available.

~ The intersection is currently signalized in the field.

***** The intersection is currently unsignalized in the field.

@ A future traffic signal is proposed at this location.

$ A future stop sign is proposed at this location for the Build Scenario with NB right-in right-out movement only.

TABLE 2

Year 2010 PM Design Hour Intersection LOS Analysis Results Comparison for Phase 1A

Intersection	No-Build Scenario			Build Scenario-1			Build Scenario-2		
	Delay (sec)	LOS	Maximum V/C Ratio	Delay (sec)	LOS	Maximum V/C Ratio	Delay (sec)	LOS	Maximum V/C Ratio
SR 426/ CR 419 @									
SR 434~	158.7	F	1.36	74.6	E	1.06	64.2	E	1.07
Station Street/CR 426[$]	237.2	F	1.54	NAV	NAV	NAV	NAV	NAV	NAV
Division Street/Oviedo Boulevard~	42.8	D	0.95	40.4	D	0.93	47.8	D	1.00
SR 434/ Central Avenue @									
Garden Street/ Station Street*	7.2/13.1	A/B	0.45	0.0/13.7	A/B	0.45	0.0/13.7	A/B	0.45
Franklin Street*[@]	11.7/73.2	B/F	1.26	16.0	B	0.80	33.3	C	0.99

Notes:

1. Intersection LOS and Delay are reported for signalized intersections. In the case of unsignalized intersections, the delay and LOS are reported for major street turn movement /minor street (worst case).

2. No Build Scenario maintains the existing geomtery at the study intersections.

3. SB left turn movement is prohibited in Build Scenario 2 at SR 426/CR 419 and SR 434

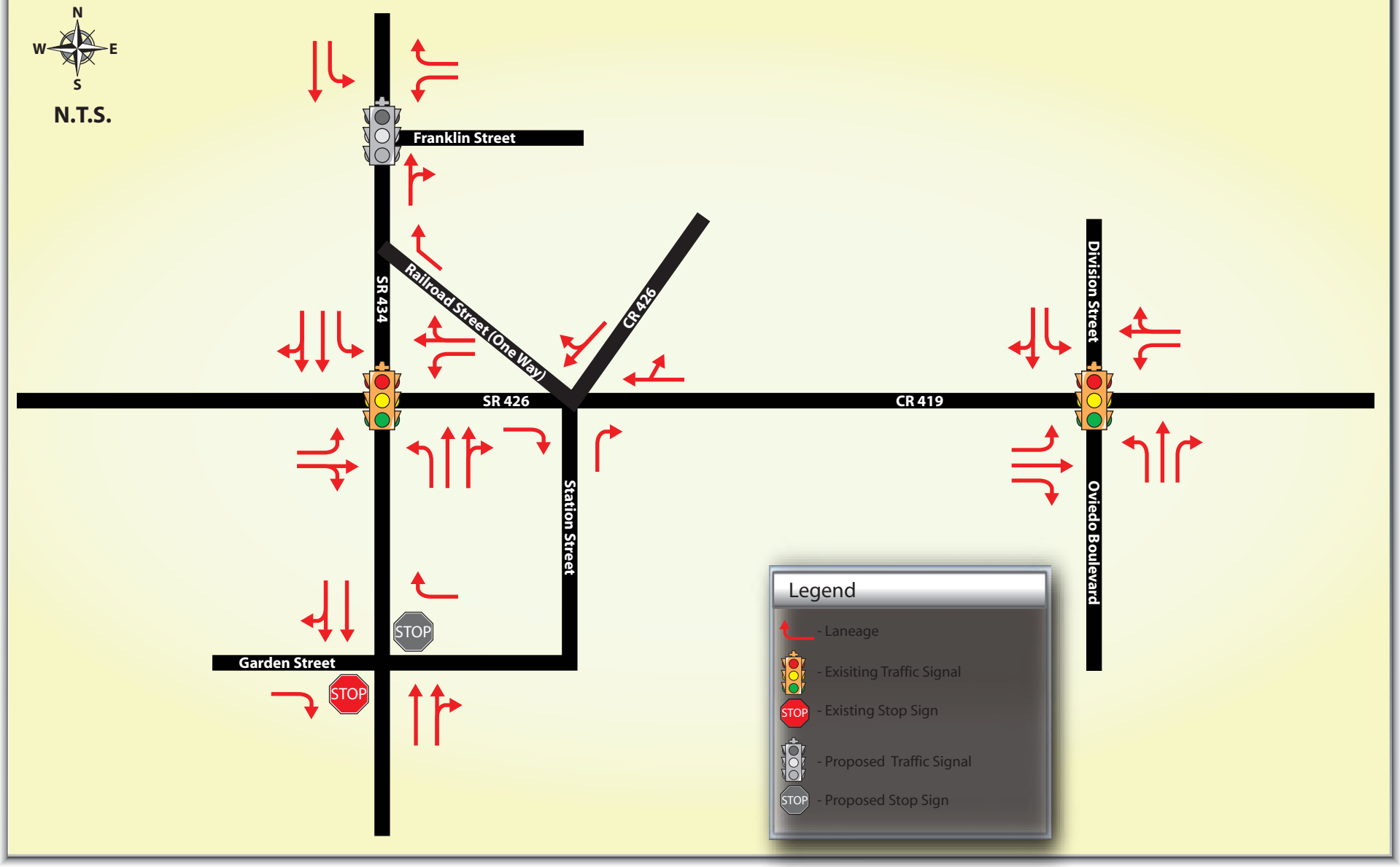
4. NAV stands for Not Available.

~ The intersection is currently signalized in the field.

***** The intersection is currently unsignalized in the field.

@ A future traffic signal is proposed at this location.

$ A future stop sign is proposed at this location for the Build Scenario with NB right-in right-out movement only.



Prepared for: Seminole County
Prepared with: Inwood Consulting Engineers
Prepared by: GMB Engineers & Planners, Inc.

SR 426/CR 419
Design Traffic and Simulation Study
Phase 1

Figure 4
Year 2010 Proposed Build Geometry

Table 3: Phase 1 (Year 2010) Design Hour Intersection Synchro LOS & Control Delay Comparison

AM Peak Hour						
Synchro Based Intersection LOS						
Intersection	**No Build Scenario**		**Original Build Scenario (with CR 426 Realignment)**		**Revised Build Scenario (without CR 426 Realignment)**	
	Delay (sec/veh)	**LOS**	**Delay (sec/veh)**	**LOS**	**Delay (sec/veh)**	**LOS**
SR 426 at SR 434*	375.3	F	56.3	E	39.3	D
CR 419 at Station Street/CR 426*	212.1	F	NA	NA	NA	NA
CR 419 at Proposed CR 426 Realignment**	NA	NA	8.5	A	NA	NA
CR 419 at Division Street/Oviedo Blvd.*	57.3	E	34.6	C	60.6	E
SR 434 at Franklin Street***	10.2/656.4	B/F	16.0	B	16.1	B
Total Control Delay	569.4 veh-hours		90 veh-hours		87.5 veh-hours	

PM Peak Hour						
Synchro Based Intersection LOS						
Intersection	**No Build Scenario**		**Original Build Scenario (with CR 426 Realignment)**		**Revised Build Scenario (without CR 426 Realignment)**	
	Delay (sec/veh)	**LOS**	**Delay (sec/veh)**	**LOS**	**Delay (sec/veh)**	**LOS**
SR 426 at SR 434*	158.7	F	59.9	E	40.9	E
CR 419 at Station Street/CR 426*	237.2	F	NA	NA	NA	NA
CR 419 at Proposed CR 426 Realignment**	NA	NA	4.9	A	NA	NA
CR 419 at Division Street/Oviedo Blvd.*	42.8	D	27.9	C	41.4	D
SR 434 at Franklin Street***	11.7/73.2	B/F	17.5	B	23.0	C
Total Control Delay	314.1 veh-hours		86.3 veh-hours		78.4 veh-hours	

Notes:

1. Intersection LOS and Delay are reported for signalized intersections. In the case of unsignalized intersections, the delay and LOS are reported for major street turn movement /minor street (worst case).
2. No Build Scenario maintains the existing geometry at the study intersections.
3. Total Control Delay = Sum of {(Intersection Delay)*(Intersection Volume)/3600} for all the study intersections.

* Existing Traffic Signal

** Proposed traffic signal

*** New traffic signal to be installed by FDOT in FY 2012/13

original Build Scenario and the revised Build Scenario would operate at a significantly better LOS conditions compared to the No-Build Scenario.

Due to the elimination of the CR 426 realignment in the revised Phase 1 Build Scenario, the traffic that would have used this realignment was redistributed through the intersections at CR 419/Oviedo Boulevard and at SR 434/Franklin Street. This resulted in higher traffic volumes and longer delays at these two intersections compared to the original Phase 1 Build Scenario.

However, these two intersections would still operate at LOS E or better, which meets the level of service standard of LOS E for this roadway. In addition, the revised Build Scenario would have less overall control delays during both the AM and PM design hours compared to the original Phase 1 Build Scenario. This is mainly because of the elimination of the delays that would be experienced at the traffic signal at the CR 419 and CR 426 intersection.

In conclusion, the Phase 1 Build Scenario (without the CR 426 realignment) would provide significant improvements in the traffic operations within the downtown street network. In addition, the elimination of the CR 426 realignment would not cause adverse impacts compared to the original Build Scenario. Therefore, it is recommended that Phase 1 Build Scenario (without CR 426 realignment) be implemented in the Phase 1 of the project.

2.3 PD&E Re-evaluation

The PD&E Re-evaluation analysis was to update the Design Traffic Analysis that was prepared in May 2008. The goal of this PD&E Re-evaluation analysis is to update the Build Geometry (without CR 426 realignment) that will provide an acceptable LOS within the study corridor. In addition, this analysis also compares the MOEs with the original Build Scenario (with CR 426 realignment) to determine whether the elimination of CR 426 would cause any adverse impacts to the traffic operations within the downtown street network.

The traffic projections from the May 2008 Design Traffic Analysis were used in this PD&E Re-evaluation. Due to the elimination of the CR 426 realignment in the revised Build Scenario, the traffic that would have used this realignment was redistributed through the intersections at CR 419/Oviedo Boulevard and at SR 434/Franklin Street. This resulted in higher traffic volumes at these two intersections compared to the original Build Scenario.

Because of the higher traffic volumes, a southbound right turn lane was identified on Oviedo Boulevard at CR 419 in the revised Build Scenario in order to meet the level of service standard for this intersection. With this improvement, both of these two intersections would operate at LOS E or better.

A comparative LOS and SYNCHRO control delay analysis was conducted between the two scenarios as shown in Table 4 for the AM and PM Design Hour. Based on the intersection delay time and overall control delay time, the original Build Scenario (with CR 426 re-

Table 4: Year 2030 Design Hour Intersection Synchro LOS & Control Delay Comparison

AM Peak Hour				
Synchro Based Intersection LOS				
Intersection	**Original Build Scenario (with CR 426 Realignment)**		**Revised Build Scenario (without CR 426 Realignment)**	
	Delay (sec/veh)	**LOS**	**Delay (sec/veh)**	**LOS**
SR 426 at SR 434*	64.7	E	70.5	E
CR 419 at Proposed CR 426 Realignment**	34.3	C	NA	NA
CR 419 at Division Street/Oviedo Blvd.*	49.7	D	49.9	D
SR 434 at Franklin Street***	41.2	D	44.4	D
Total Control Delay	236.3 veh-hours		226.3 veh-hours	

PM Peak Hour				
Synchro Based Intersection LOS				
Intersection	**Original Build Scenario (with CR 426 Realignment)**		**Revised Build Scenario (without CR 426 Realignment)**	
	Delay (sec/veh)	**LOS**	**Delay (sec/veh)**	**LOS**
SR 426 at SR 434*	71.1	E	76.5	E
CR 419 at Proposed CR 426 Realignment**	45.7	D	NA	NA
CR 419 at Division Street/Oviedo Blvd.*	49.2	D	57.2	E
SR 434 at Franklin Street***	30.3	C	45.7	D
Total Control Delay	250.0 veh-hours		250.5 veh-hours	

Notes:

1. Intersection LOS and Delay are reported for signalized intersections. In the case of unsignalized intersections, the delay and LOS are reported for major street turn movement /minor street (worst case).

2. No Build Scenario maintains the existing geometry at the study intersections.

3. Total Control Delay = Sum of {(Intersection Delay)*(Intersection Volume)/3600} for all the study intersections.

* Existing Traffic Signal

** Proposed traffic signal

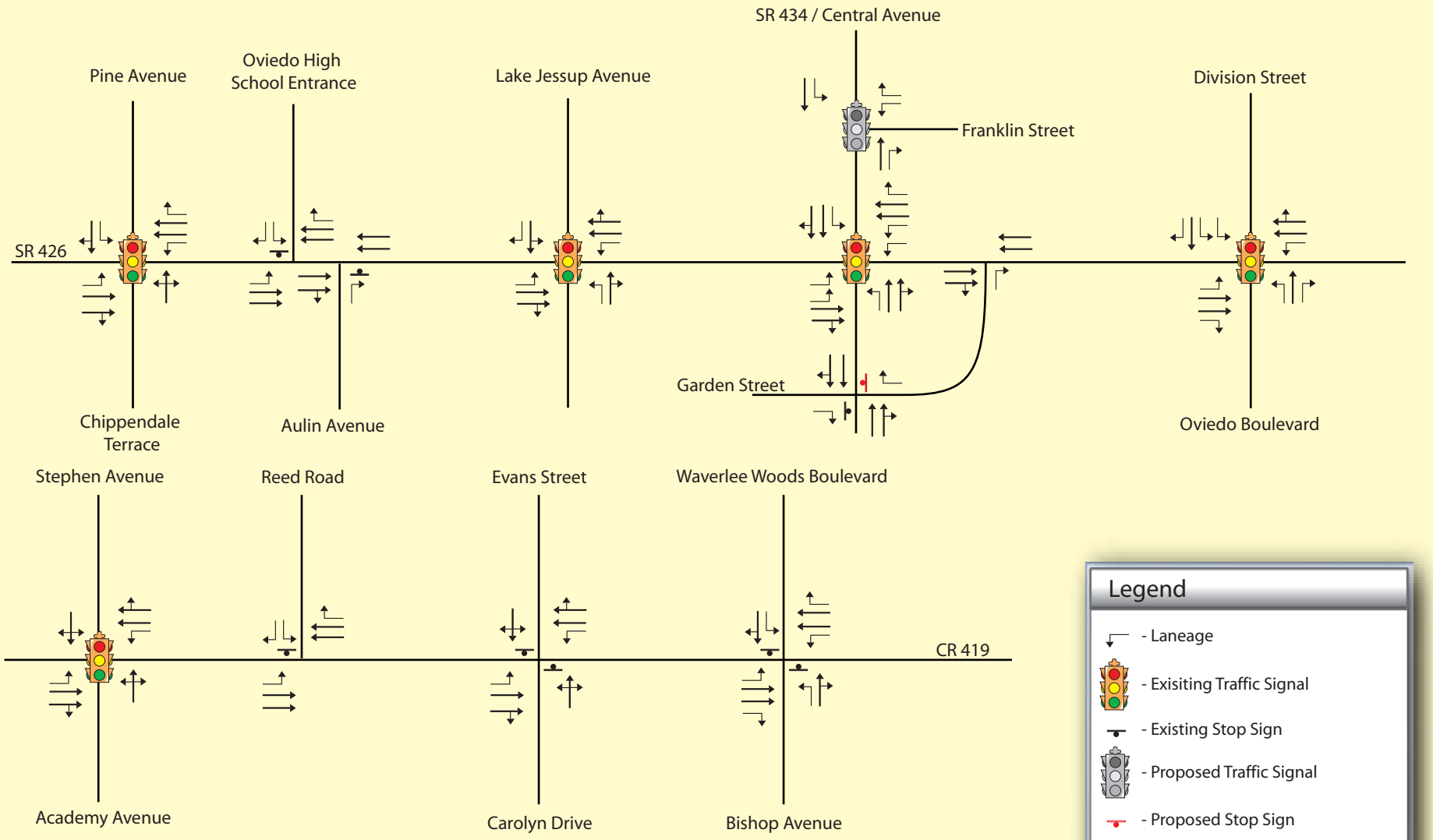
*** New traffic signal to be installed by FDOT in FY 2012/13

alignment) and the revised Build Scenario (without CR 426 realignment) are comparable during both the AM and PM design hours.

Based on the LOS analysis and CORSIM simulation analysis, the recommended Build Geometry for the entire corridors is shown in Figure 5. The recommended improvements are summarized in Table 5. The main difference in the recommended geometry between the PD&E Re-evaluation analysis and the 2008 Design Traffic Analysis is:

- A southbound right turn lane at the intersection of CR 419 and Oviedo Boulevard.

Both the original Build Geometry and the revised Build Geometry include adding a northbound right turn lane at the intersection of SR 434 and Franklin Street. Since this turn lane is within the Phase 1 project limits, it is recommended that this turn lane be incorporated in the Phase 1 design. The turn lane improvement at the intersection of CR 419 and Oviedo Boulevard can be addressed in the future design of Phase 2.



Prepared for: Seminole County
Prepared with: Inwood Consulting Engineers
Prepared by: GMB Engineers & Planners, Inc.

SR 426 / CR 419
Design Traffic and Simulation Study
PD&E Re-Evaluation

Figure 5
Year 2030 Proposed Build Geometry

Table 5 - Recommended Improvements by Design Year 2030

Segment/Intersection	Improvement
SR 426/CR 419	Additional EB and WB through lanes from Pine Avenue to just east of Bishop Avenue/Waverlee-Woods Boulevard
SR 434	Allow NB movement at SR 434 and SR 426/CR 419. Widen SR 434 to four lanes near the intersection with SR 426/CR 419
SR 426 and Lake Jessup Avenue	Exclusive NB left turn lane
SR 434 and Franklin Street	Exclusive NB right turn lane.
SR 426/ CR 419 and SR 434	Additional EB & WB left turn lanes. Exclusive WB right turn lane.
CR 419 and Division Street/ Oviedo Boulevard	Additional SB left turn lane. Exclusive SB right turn lane
CR 419 and Station Street/CR 426	Disconnect the link between CR 426 and CR 419. Allow right-in right-out movement only along NB movement on Station Street
SR 434 and Station Street/garden Street	Allow right-in right-out movement only on EB and WB movements.

3.0 POND SITES

The information in this section was extracted from the "*Pond Siting Report Addendum for SR 426 / CR 419 Widening from Pine Avenue to Avenue B*" dated August 2010. Please refer to that report for more detailed data and analysis. That report was prepared as an addendum to the previously approved "*Pond Siting Report for SR 426 / CR 419 Widening from Pine Avenue to Avenue B"* dated January 2009*.*

One of the purposes of the PD&E Re-evaluation is to investigate and evaluate alternate pond sites to replace the currently proposed pond sites for Basins C and D. The Addendum discusses and analyzes the stormwater management plan for these two basins, and identifies alternate pond sites and the right of way requirements.

3.1 Alternative Pond Sites in Basins C and D

Eight pond combination alternatives were evaluated for Basins C and D together in the January 2009 Pond Siting Report. The final recommended alternative included three pond sites (C-1, C-2, and C-4) for Basin C and two pond sites (D-5A and D-6) for Basin D (see Appendix 7).

In this re-evaluation, three new alternative pond sites were identified for Basin C and Pond Site D was identified for Basin D. The graphic for each alternative pond site is included in Appendix 8. Pond Site D is a combination of the currently approved Pond Site D-6 and the previously investigated Pond Site D-7. Pond Site D-7 was evaluated in the January 2009 Pond Siting Report, but was not recommended as a final pond site.

Summary tables for each of the drainage basins, and potential pond site alternatives are included in the appendix of the Pond Siting Report Addendum. By factoring all impacts and right of way costs, Site 3 was recommended to replace the previously approved Pond C-1, C-2, C-4, D-5A, and D-6.

3.2 Contamination

A Preliminary Contamination Assessment (PCA) was conducted for the recommended Site 3. The assessment results are documented in "*Supplemental Preliminary Contamination Assessment Report"*, prepared by PSI (July 2010), which is included in the appendix of the Pond Siting Report Addendum. Based on this report, no further assessment appears to be warranted.

3.3 Cultural Resource Assessment Survey

A Cultural Resource Assessment Survey was conducted for the three alternate pond sites. The assessment survey results are documented in the "*Technical Memorandum - Cultural Resource Assessment Survey of Three Ponds Located along the SR 426 PD&E Study Corridor*" prepared by SEARCH (August 2010), which is included in the appendix of the Pond Siting Report Addendum. Based on this Technical Memorandum, no archaeological sites or archaeological occurrences were identified during the archaeological survey of Sites 1, 2, and 3. Three historical structures were identified within the footprints of Sites 2 and 3. However,

all three historical buildings lack architectural distinction and significant historical association, and do not meet the minimum criteria for listing in the NRHP. Therefore, no further work is recommended.

3.4 Environment

An Environmental Assessment was conducted for the three alternate pond sites. The assessment results are documented in the "*Technical Memorandum – Environmental Assessment Addendum in Support of the Pond Siting Report*", which is included in the appendix of the Pond Siting Report Addendum. This Technical Memorandum concluded that there are no wetland impacts at Site 3. Also, natural habitats within the SR 434 / SR 426 intersection improvement areas have the potential to support native wildlife and floral species. As a result, it was determined that species-specific surveys were not warranted.

4.0 PUBLIC INVOLVEMENT

Property owner notification letters were mailed to the property owners and hand delivered to the tenants of the three alternate sites. No property owners expressed objections to conducting on-site investigation during the PD&E Re-evaluation.

Another property owner notification letters were also mailed to the property owners of the three sites and to the owners of the previously approved sites regarding the final recommendations.

The final recommendations of this PD&E Reevaluation were presented to the City of Oviedo Council at two work sessions that were held on November 8, 2010 and on February 15, 2011. The City Council supports the final recommendations from this PD&E Reevaluation.

5.0 RECOMMENDATIONS

Based on the results of the PD&E Re-evaluation Study as described in this technical memorandum, the following improvements are recommended and are included in Figure 6.

- Eliminate CR 426 Realignment from the previous PD&E study recommendation.
- Replace the previously approved pond sites in Basins C and D with Site 3.
- Incorporate the recommended northbound right turn lane at the intersection of SR 434 and Franklin Street in the Phase 1 construction plans.

Based on the results of this PD&E Reevaluation, it was determined that no substantial changes have occurred in the social, economic, or environmental effects of the proposed changes that would significantly affect the quality of human environment. The FHWA concurred with the re-evaluation in November 2010 (See Appendix 9).

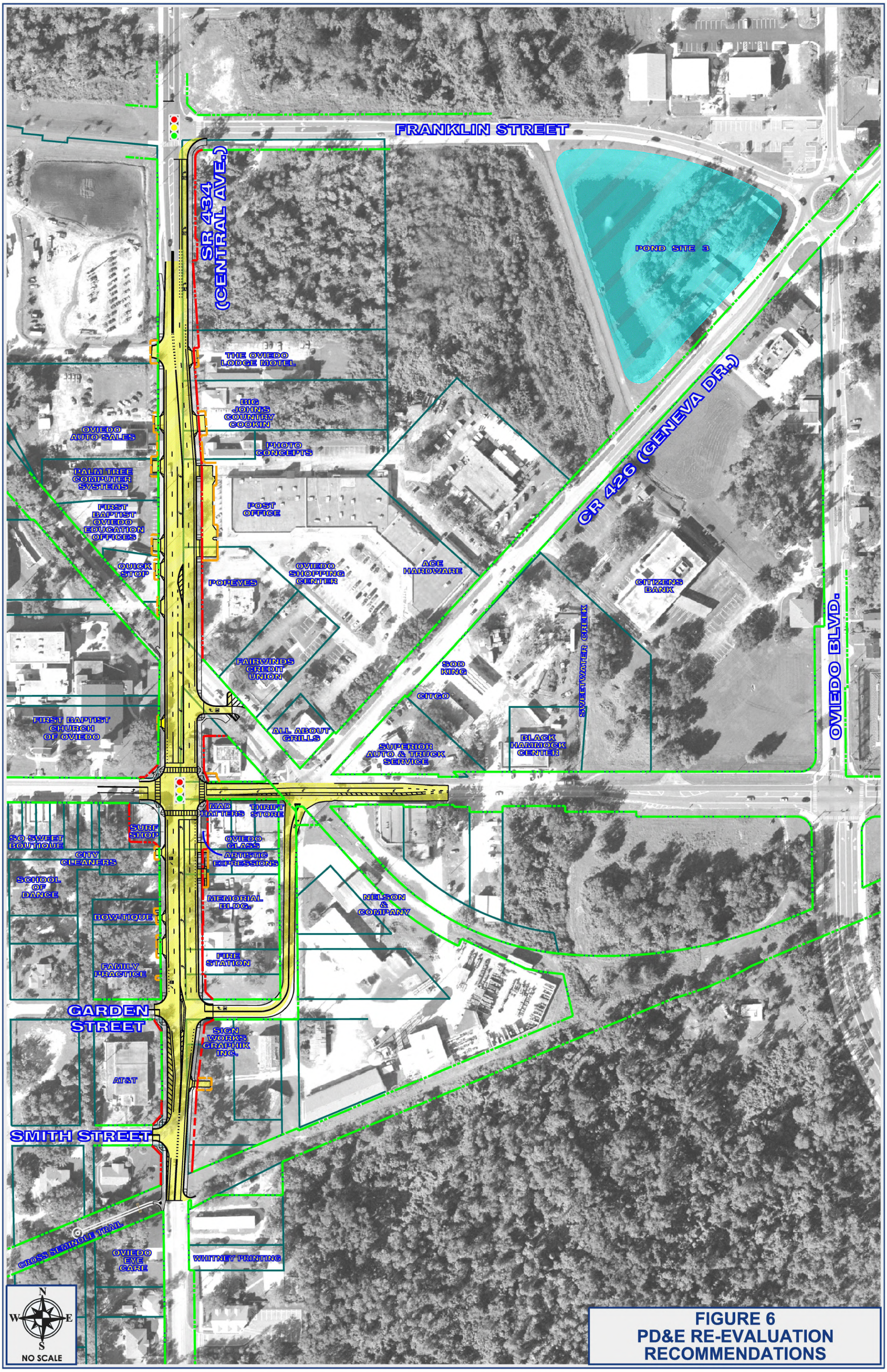
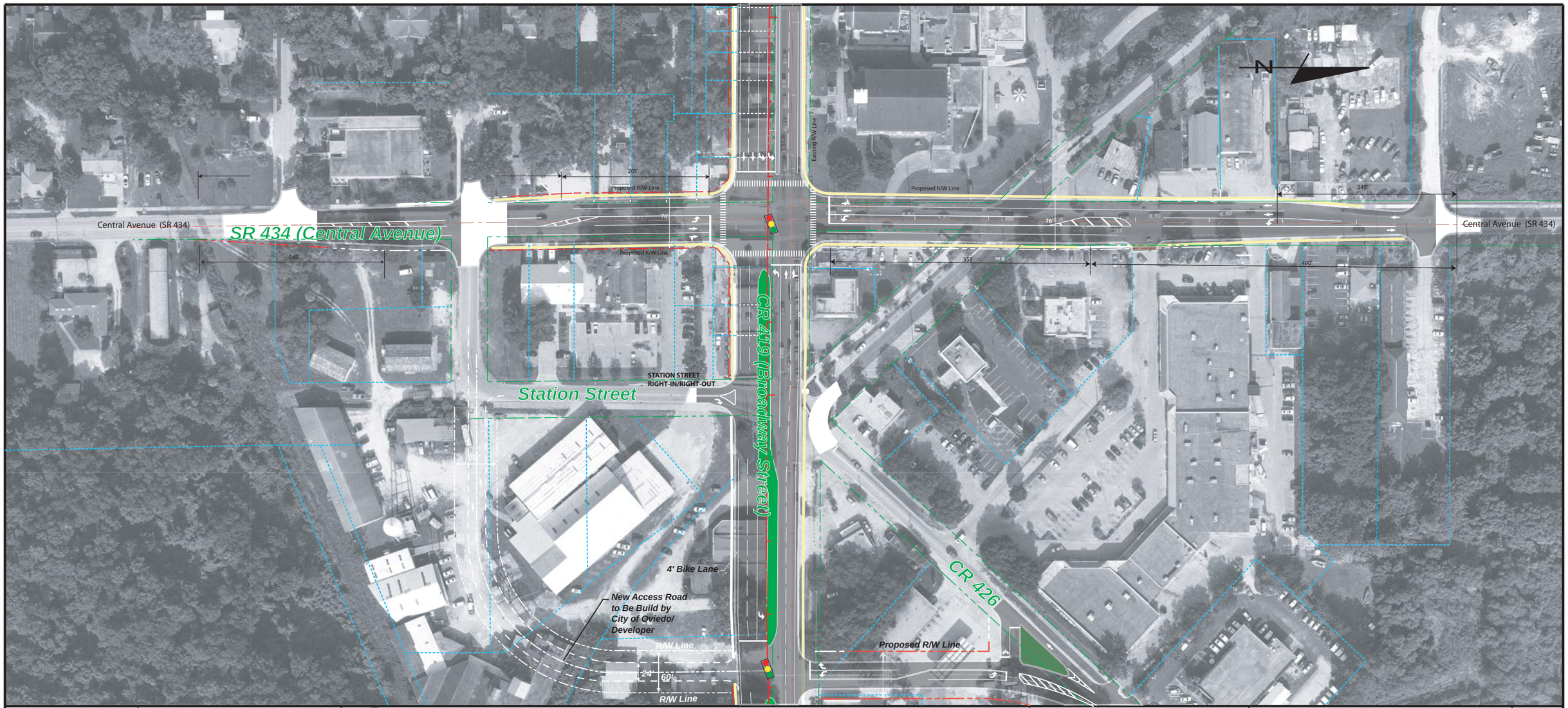


FIGURE 6
PD&E RE-EVALUATION RECOMMENDATIONS

APPENDIX 1 – Downtown Improvements in the Original PD&E Study



DRMP
ENGINEERS · SURVEYORS · PLANNERS · SCIENTISTS

REVISIONS		
DATE	BY	DESCRIPTION

OVIEDO · FLORIDA

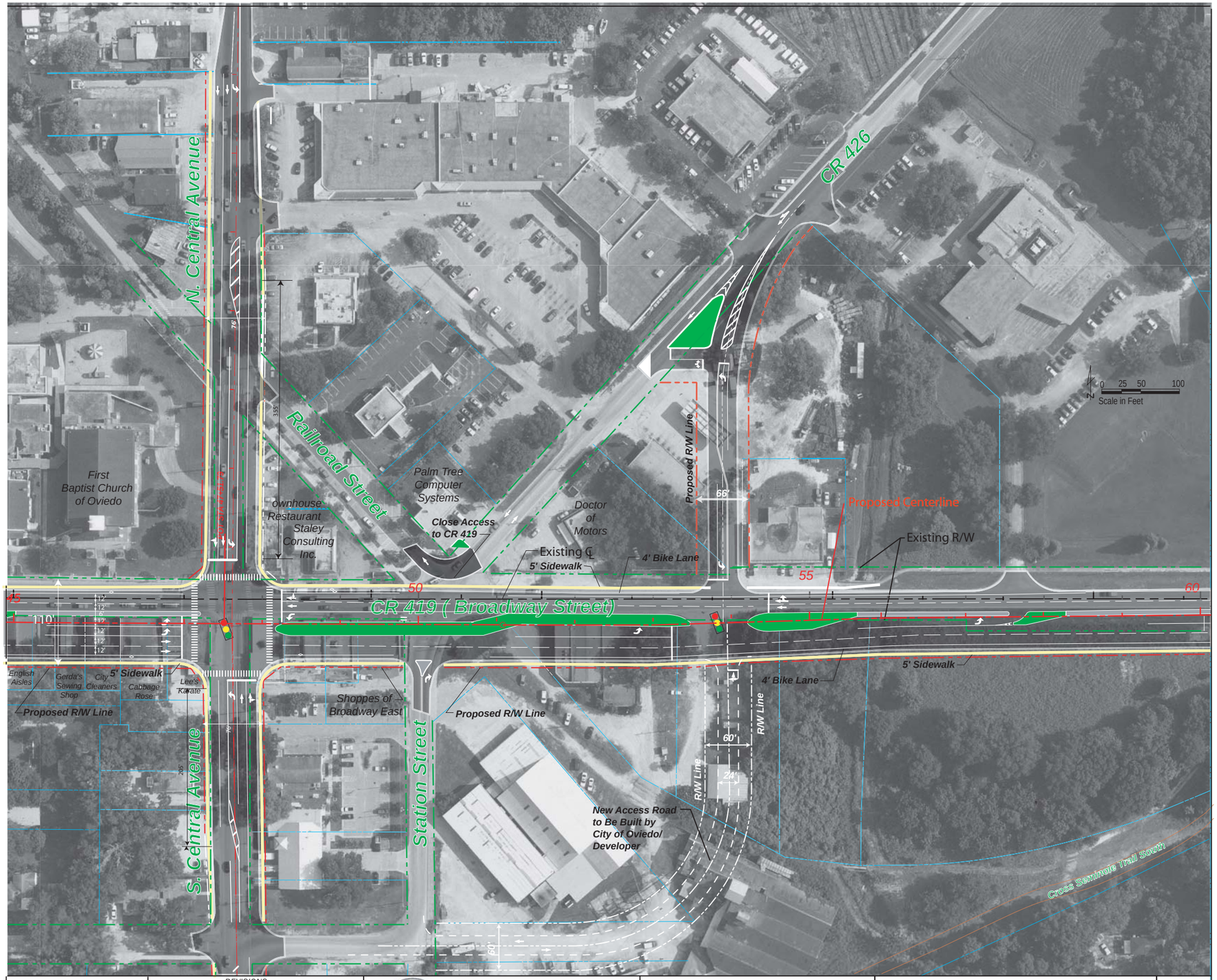
SR 426 /CR 419
PROJECT DEVELOPMENT &
ENVIRONMENT (PD&E) STUDY
From Pine Avenue to Lockwood Boulevard
City of Oviedo

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

Preferred Project Alternative

Sheet
0



DRMP
ENGINEERS · SURVEYORS · PLANNERS · SCIENTISTS

REVISIONS		
DATE	BY	DESCRIPTION

SR 426 /CR 419
PROJECT DEVELOPMENT &
ENVIRONMENT (PD&E) STUDY
From Pine Avenue to Lockwood Boulevard
City of Oviedo

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

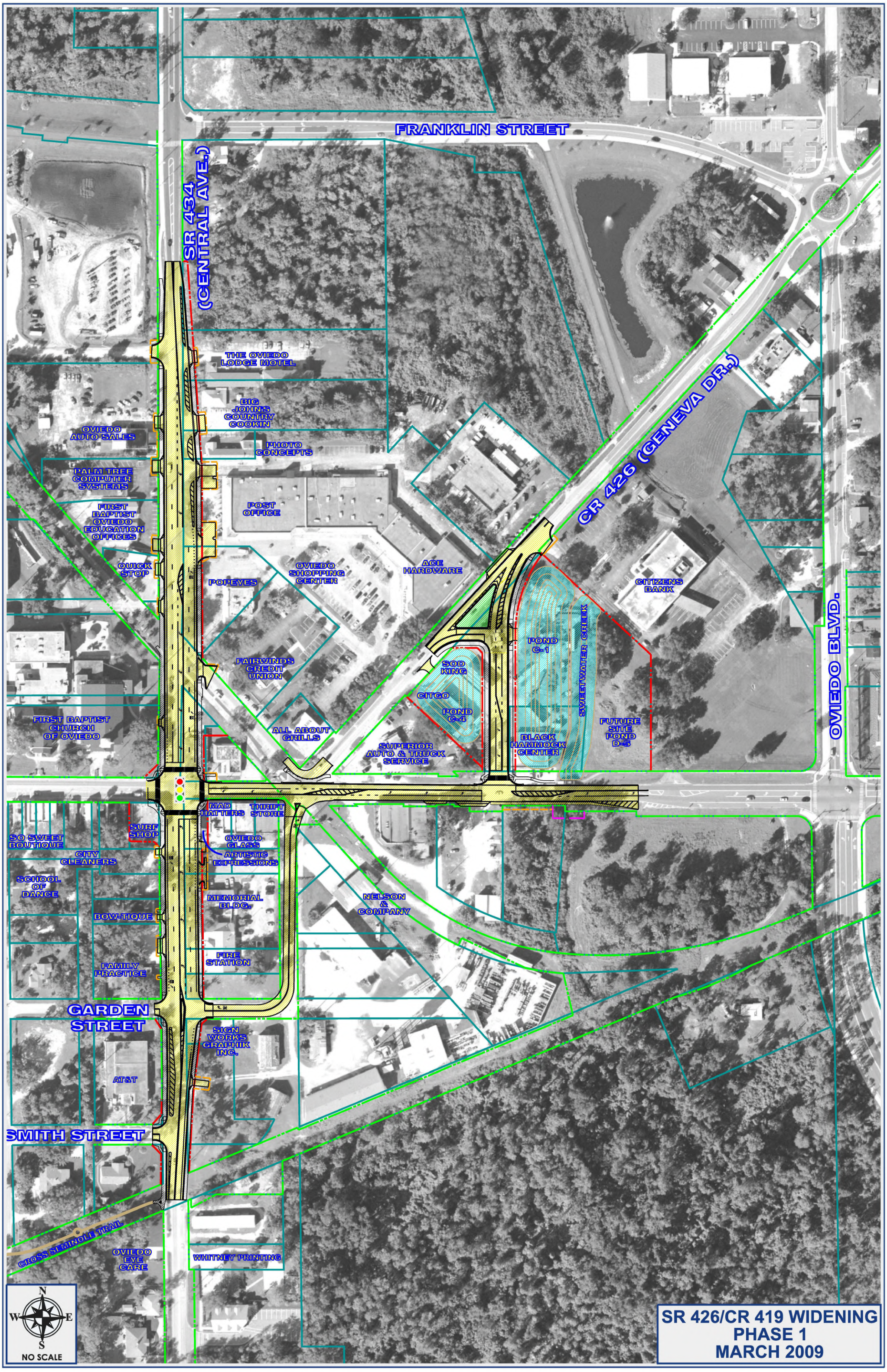
Preferred Project Alternative

Sheet 4

09/30/2002 09:31:07 AM N:\OOrdy\design\base.DGN

APPENDIX 2 – Downtown Improvements in the Original Phase 1 Plans

(March 2009)


FRANKLIN STREET
SR 434 (CENTRAL AVE.)
CR 426 (GENEVA DR.)
OVIEDO BLVD.
THE OVIEDO LODGE MOTEL
BIG JOHN'S COUNTRY COOKIN
OVIEDO AUTO SALES
PHOTO CONCEPTS
PALM TREE COMPUTER SYSTEMS
FIRST BAPTIST OVIEDO EDUCATION OFFICES
POST OFFICE
QUICK STOP
POPEYES
OVIEDO SHOPPING CENTER
ACE HARDWARE
CITIZENS BANK
POND C-1
SWEETWATER CREEK
SOD KING
CITGO
POND C-4
FAIRWINDS CREDIT UNION
FIRST BAPTIST CHURCH OF OVIEDO
ALL ABOUT GRILLS
SUPERIOR AUTO & TRUCK SERVICE
BLACK HAMMOCK CENTER
FUTURE SITE POND D-5
MAD HATTERS
THRIFT STORE
SURF SHOP
SO SWEET BOUTIQUE
OVIEDO GLASS
ARTISTIC EXPRESSIONS
CITY CLEANERS
SCHOOL OF DANCE
MEMORIAL BLDG.
NELSON & COMPANY
BOW-TIQUE
FIRE STATION
FAMILY PRACTICE
GARDEN STREET
SIGN WORKS GRAPHIK INC.
AT&T
SMITH STREET
CROSS SEMINOLE TRAIL
OVIEDO EYE CARE
WHITNEY PRINTING
N
W
E
S
NO SCALE
SR 426/CR 419 WIDENING
PHASE 1
MARCH 2009

APPENDIX 3 – SR 434 Alignment Evaluation Matrix

SR 434 Alternative Evaluation
Total Project Impacts

EVALUATION MEASURE	Alternative 1 Center Widening	Alternative 2 Right Widening	Alternative 3 Left Widening
Social/Cultural Impacts			
TOTAL NUMBER OF PARCELS	27	17	18
Residential Property			
Impacts	0	0	0
Potential Relocations	0	0	0
Business Property			
Impacts	20	11	14
Potential Relocations	6	10	9
Unimproved Sites			
Impacts	7	6	4
Church Property			
Impacts	1	0	1
Potential Relocations	0	0	0
Community Facilities			
Impacts	1	1	0
Potential Relocations	0	1	0
Cross Seminole Trail			
Impacts	None	None	None
Potential Historical Sites			
Impacts	0	0	0
Potential Relocations	0	0	0
Park Lands			
Impacts	0	0	0
Cemeteries			
Impacts	0	0	0
School Property			
Impacts	0	0	0
Natural Environment Impacts			
Existing Wetland Areas (acres)	0	0	0
Threatened and Endangered Species	None	None	None
Riparian Habitat Protection Zone (RHPZ)(acres)	0	0	0
Outstanding Florida Waters (OFW)	None	None	None
Potential 100-year Floodplains (acres)	0	0	0
Physical Environmental Impacts			
Potential Noise Impacts	No	No	No
Potential Utility Relocations	Yes	Yes	Yes
Project Cost ($ Millions)			
Right-of-Way Acquisition	15.52	14.70	16.90
Roadway Construction	2.15	2.15	2.19
Total Project Cost ($ Millions)	17.67	16.85	19.09

APPENDIX 4 – Approved PD&E Re-evaluation Form

(September 2009)

Florida Department of Transportation
PROJECT REEVALUATION FORM

I. GENERAL INFORMATION (Originally approved document)

a. Reevaluation Phase: Right-of-Way Acquisition and Design Change

b. Document Type and Date of Approval: Type II C.E. 6/13/07

c. Project Numbers: TCSP 035 U (Federal Aid) 415030-1 (FPN No.)

d. Project Local Name, Location and limits: SR 426/CR419 (Broadway Street) from Pine Avenue to west of Lockwood Boulevard

e. Segment(s) of Highway Being Advanced: Right-of-Way Acquisition and Design Change: SR 426/CR419 (Broadway Street) Intersection with SR 434 (415030-2); Design Change: SR 426/CR 419 from Pine Avenue to Avenue B (415030-3).

f. Name of Analyst(s) Kristee Booth & Stephen Tonjes

g. County: Seminole

II. CONCLUSION AND RECOMMENDATION

The above environmental document has been reevaluated as required by 23 CFR 771 or the Project Development and Environment Guidelines of FDOT, and it was determined that no substantial changes have occurred in the social, economic, or environmental effects of the proposed action that would significantly affect the quality of the human environment. Therefore, the original Administration Action remains valid.

It is recommended that the project identified herein be advanced to the next phase of project development.

REVIEWER SIGNATURE BLOCK

Environmental Administrator — Date: 9/11/09

III. FHWA CONCURRENCE BLOCK

for

Federal Highway Administration, Division Administrator — Date: 09/16/2009

IV. CHANGE IN IMPACT STATUS OR DOCUMENT COMPLIANCE

	YES	NO	COMMENTS
A. SOCIAL IMPACTS			
1. Land Use Changes	[ ]	[X]	
2. Community Cohesion	[ ]	[X]	
3. Relocation Potential	[ ]	[X]	
4. Community Services	[ ]	[X]	
5. Title VI Considerations	[ ]	[X]	
6. Controversy Potential	[ ]	[X]	
7. Utilities and Railroads	[ ]	[X]	
B. CULTURAL IMPACTS			
1. Section 4(f) Lands	[ ]	[X]	
2. Historic Sites/Districts	[ ]	[X]	
3. Archeological Sites	[ ]	[X]	
4. Recreation Areas ?	[ ]	[X]	
5. Pedestrian/Bicycle Facilities	[ ]	[X]	
C. NATURAL ENVIRONMENT			
1. Wetlands	[ ]	[X]	
2. Aquatic Preserves	[ ]	[X]	
3. Water Quality	[ ]	[X]	
4. Outstanding Fla. Waters	[ ]	[X]	
5. Wild/Scenic Rivers	[ ]	[X]	
6. Floodplains	[ ]	[X]	
7. Coastal Zone Consistency	[ ]	[X]	
8. Coastal Barrier Island	[ ]	[X]	
9. Wildlife and Habitat ? shallow	[ ]	[X]	
10. Farmlands	[ ]	[X]	
11. Visual/Aesthetics	[ ]	[X]	
D. PHYSICAL IMPACTS			
1. Noise ? sinder [illegible]	[ ]	[X]	
2. Air	[ ]	[X]	
3. Construction	[ ]	[X]	
4. Contamination	[ ]	[X]	
5. Navigation	[ ]	[X]	

V. EVALUATION OF MAJOR DESIGN CHANGES AND REVISED DESIGN CRITERIA

(e.g.) Typical Section Changes, Alignment Shifts, Right of Way Changes, Bridge to Box Culvert, Drainage Requirements, Revised Design Standards).

The design segment SR 426/CR 419 intersection with SR 434 (415030-2) is being reevaluated for Right-of-Way Acquisition and design change. This design segment is being designed by Seminole County as Phase 1 Design of the PD&E Study 415030-1, and is at 90% design plans. The design change is an alignment shift to widen to the right instead of center along SR 434 and SR 426, as well as to realign CR 426 to make the intersection operate better. This shift decreases right-of-way costs, has no new environmental impacts since it is within right-of-way that had been previously surveyed, and is not controversial (a public meeting was held). Right-of-way changes were for 9 pond sites. All the new pond sites have been environmentally cleared, including SHPO clearance dated 4/8/09.

The design segment 415030-3, SR 426/CR 419 from Pine Avenue to Avenue B, is being designed by the county as Phase 2 Design of the PD&E Study 415030-1, and is at 15% plans. There has been a design change since the PD&E Study. The design change is an alignment shift to widen to the right instead of center along SR 426. This shift decreases right-of-way costs, has no new environmental impacts since it is within right-of-way that had been previously surveyed, and is not controversial (a public meeting was held).

OTHER DESIGN SEGMENTS:

415030-4: SR 426/CR 429 from Avenue B to west of Lockwood Road is not currently being designed by the county but is Phase 3 Design of the PD&E Study 415030-1.

VI. MITIGATION STATUS AND COMMITMENT COMPLIANCE

Mitigation status:
Impacts to 0.1 acres of wetlands will require mitigation. Mitigation will be provided through off-site wetland preservation at the Brio Property.

Commitment Compliance:
The FDOT has made numerous commitments for the proposed SR 426/CR419 widening project within the Type II Categorical Exclusion (dated 6/13/07); see the attached pages for details. See below for commitment compliance status.

1. During the design phase, the designing agency will re-evaluate reasonable and feasible noise abatement measures at the impacted locations. The proposed improvement includes the recommendation of noise abatement measures (noise walls) in the vicinity of the Kingsbridge East and Waverly Woods subdivisions. The construction of noise abatement measures will be contingent upon the detailed noise analysis to be conducted during the final design process supporting the need for abatement.

The detailed noise analysis shall determine:

a. Reasonable cost analyses show that the economic cost of the barrier(s) will not exceed the guidelines;
b. Community input regarding desires, types, heights and locations of barrier has been solicited;
c. Preferences regarding compatibility with adjacent land uses, particularly as addressed by officials having jurisdiction over such land uses has been noted;
d. Safety and engineering aspects, as related to the roadway user and the adjacent property owner have been reviewed; and
e. Any other mitigating circumstances found in Section 17-4.6.1 of the PD&E Manual have been analyzed.

(*Applies to design segment 415030-4 which is not in design yet but will be handled during that phase.*)

2. During the design phase, the designing agency shall evaluate enhancements as necessary related to recreational trail connectivity (tie-ins to the Cross Seminole Trail and other state and/or local trail facilities). (*Applies to 415030-1. To connect to the trails, an 8' sidewalk along the west side of SR 434 is shown in the plans.*)

3. The designing agency shall consider aesthetic enhancements including the use of stamped asphalt pavement at key intersections (Pine Avenue, North Lake Jessup Avenue, Central Avenue/ SR 434, and Oviedo Boulevard) and evaluating landscaping opportunities throughout the corridor. Design and construction of enhancements may require local funding and maintenance. (*This applies to all segments but will not be completed in Phase 1. It will be addressed during Phase 2.)*

   The design agency will include mitigation for impacts to the oak trees in front of the Lawton House, which is a historic property eligible for listing in the National Register of Historic Places. This involves the replacement of the acquired oak trees in front of the Lawton House with live oak trees of approximately 100 gallons at the time of construction. (*This applies to 415030-3 that is Phase 2, and will be handled as that project advances.*)

4. FDOT's Environmental Management Office will be given notice of the Pre-Construction Conference in order to implement the United States Fish & Wildlife Service (USFWS) Standard Protection Measures for the eastern indigo snake during the construction phase of this project (Appendix A). (*Applies to 415030-3 and 415030-4. The appropriate protection notes will be added to the design plans and the education plan will be provided during the Pre-Construction Conference.*)

5. If a portion of the Nelson & Company Property is planned to be acquired, or if the project is near the property and excavation and/or de-watering for construction is planned, then the designer shall determine if additional contamination assessment and possible remedial action may be needed. (*Applies to 415030-2, further assessment is on-going and remediation is being proposed.*)

Eastern indigo snakes may be encountered on the project. They are protected by the Endangered Species Act of 1973, as amended, and harming these snakes is punishable by fines and/or imprisonment; therefore, a protection plan has been developed for this project and requires the following action from the Contractor:

A. Prior to any clearing activities, the equipment operators and any other employees involved in clearing must be informed of the possible presence of the indigo snake, its protected status, and measures to be taken if snakes are encountered. This information will be contained in brochures and posters that the Department will supply at or before the pre-construction conference. The Contractor must distribute the brochures to all employees involved in clearing, and the posters must be displayed conspicuously at the work site.

B. If live indigo snakes are encountered in the project area, all activities that might harm the snakes shall cease until the snakes have left the area on their own. Only an individual who has been authorized by a permit issued by the U.S. Fish and Wildlife Service, or an agent of the Florida Fish and Wildlife Conservation Commission may handle indigo snakes.

C. Any sightings or encounters with indigo snakes must be reported to the District Environmental Management Office.

D. If a dead or injured indigo snake is encountered, all work in the vicinity must stop and the Engineer must be notified immediately. Work may not resume until the Engineer has consulted with Department environmental staff and the snake has been removed with the permission of the FWS.

E. Within 60 days of completion of clearing and grubbing, a report must be submitted to the Engineer containing the following information:
   1) any sightings of indigo snakes;
   2) if any relocation was permitted, a summary of the relocation and compliance with any conditions stipulated in the relocation permit.

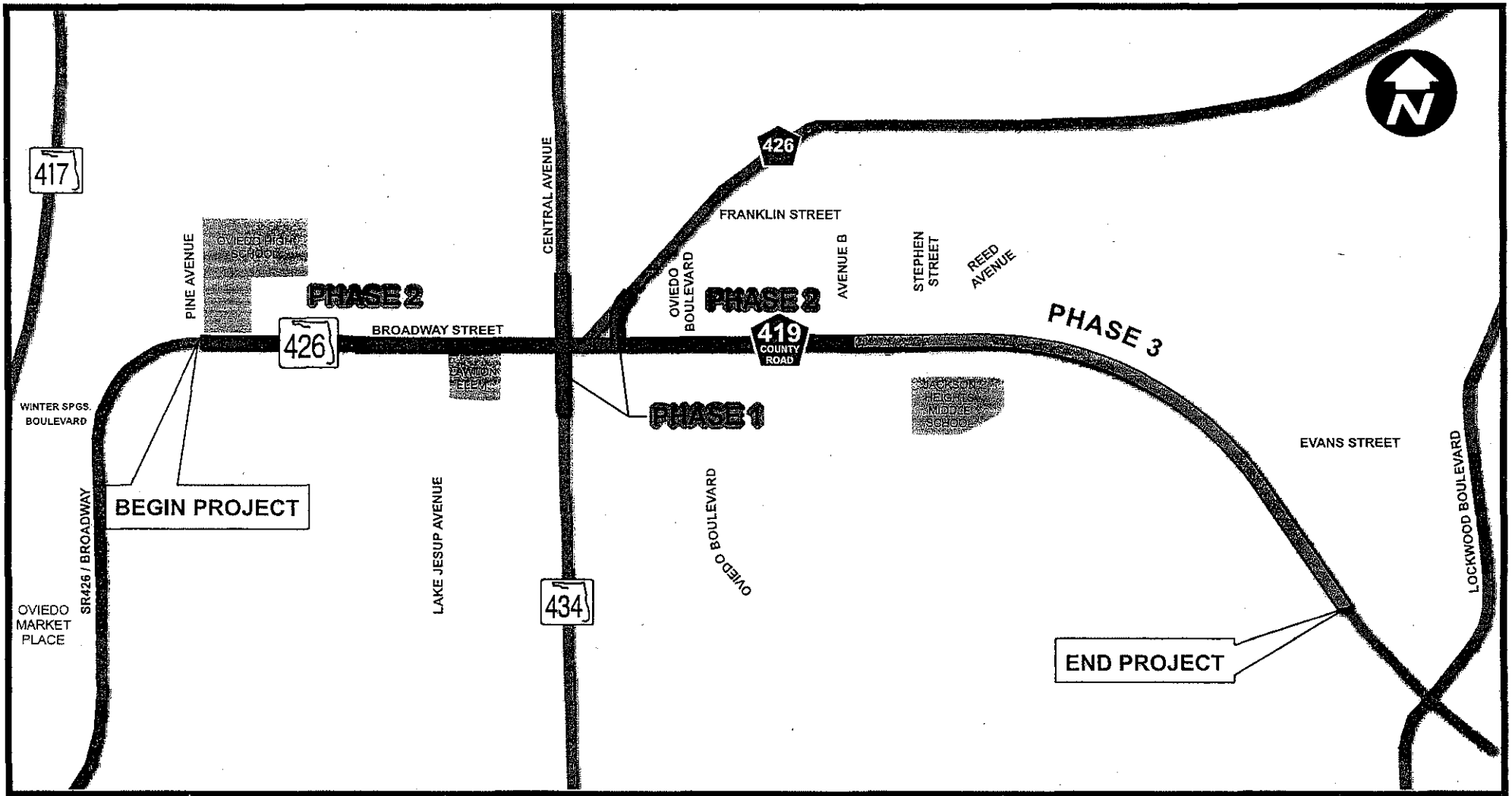
   A report must be submitted whether or not indigo snakes were sighted. The Engineer will transmit the report to Department environmental personnel for submittal to the appropriate Florida Field Office of the FWS.

VII. PERMITS STATUS

The St. Johns River Water Management District Individual Environmental Resource Permit (40-117-120191-1) was applied for 3/16/09.

The U.S. Army Corps of Engineers Nationwide Permit [SAJ-2009-01077 (NW-AWP)] was obtained for 5/15/09.

The Environmental Protection Agency NPDES Permit will be secured prior to construction.



OVIEDO - FLORIDA

STATE ROAD 426/ COUNTY ROAD 419 WIDENING
FROM PINE AVENUE TO WEST OF LOCKWOOD BOULEVARD

APPENDIX 5 – Downtown Improvements in the Revised Phase 1 Plans

(October 2009)

FRANKLIN STREET

SR 434 (CENTRAL AVE.)

THE OVIEDO LODGE MOTEL

BIG JOHN'S COUNTRY COOKIN

OVIEDO AUTO SALES

PHOTO CONCEPTS

PALM TREE COMPUTER SYSTEMS

FIRST BAPTIST OVIEDO EDUCATION OFFICES

POST OFFICE

QUICK STOP

OVIEDO SHOPPING CENTER

ACE HARDWARE

POPEYES

CITIZENS BANK

CR 426 (GENEVA DR.)

OVIEDO BLVD.

POND C-1

SWEETWATER CREEK

FAIRWINDS CREDIT UNION

SOD KING

CITGO

POND C-4

FIRST BAPTIST CHURCH OF OVIEDO

ALL ABOUT GRILLS

SUPERIOR AUTO & TRUCK SERVICE

BLACK HAMMOCK CENTER

FUTURE SITE POND D-5

MAD HATTERS

THRIFT STORE

SURF SHOP

SO SWEET BOUTIQUE

OVIEDO GLASS

ARTISTIC EXPRESSIONS

CITY CLEANERS

SCHOOL OF DANCE

MEMORIAL BLDG.

NELSON & COMPANY

BOW-TIQUE

FIRE STATION

FAMILY PRACTICE

GARDEN STREET

SIGN WORKS GRAPHIK INC.

AT&T

SMITH STREET

CROSS SEMINOLE TRAIL

OVIEDO EYE CARE

WHITNEY PRINTING

N

W E

S

NO SCALE

SR 426/CR 419 WIDENING
PHASE 1
OCTOBER 2009

APPENDIX 6 – CRAS for Bicycle Lane and Sidewalk Extension

Technical Memorandum
Cultural Resource Assessment Survey in Support of Proposed Improvements to SR 434 and SR 426 Seminole County, Florida

CONSULTANT:	Southeastern Archaeological Research, Inc. (SEARCH) 315 NW 138th Terrace, Newberry, Florida 32669
PRINCIPAL INVESTIGATOR:	Elizabeth J. Chambless, M.S., RPA
CLIENT:	Inwood Consulting Engineers
DATE:	September 2009
FM#:	415030-1-38-01

This technical memorandum details the results of a Cultural Resource Assessment Survey (CRAS) of one area of proposed sidewalk along the east side of State Road (SR) 434 in the City of Oviedo in Seminole County, Florida (see Figure 1, attached). This survey was conducted in support of proposed improvements to SR 426 and SR 434 and supplements two additional cultural resource reports: the 2004 report by Archaeological Consultants, Inc. (ACI) titled, *A Cultural Resource Assessment Survey, SR 426/CR 419 From Pine Avenue to Lockwood Boulevard in Oviedo, Seminole County, Florida* and the 2009 report by SEARCH titled, *Cultural Resource Assessment Survey of Six Ponds along State Road 426 in Seminole County, Florida*. This technical memorandum serves as an addendum to the latter report. This addendum is consistent with the regional prehistory and history, environment, research design, and field and laboratory methods described in the previous report.

The purpose of the survey was to locate, identify, and bound any archaeological resources, historic structures, and potential districts within the project area and to assess their potential for listing in the National Register of Historic Places (NRHP). This investigation was conducted to comply with Section 106 of the National Historic Preservation Act (as amended) and its implementing regulation 36 CFR Part 800 (*Protection of Historic Properties*). All work was performed in accordance with Part 2, Chapter 12 of the FDOT PD&E Manual (revised January 1999), the Cultural Resource Management Handbook (revised November 2004), and was consistent with the Florida Division of Historical Resources (FDHR) recommendations for such projects as stipulated in the FDHR's *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. This study also complies with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code.

The area of potential effects (APE) defines any area where visual, audible, and atmospheric effects on historic properties may result from the roadway improvements and subsequent maintenance. Considering the scope of the proposed improvements (sidewalk construction), the APE for this project includes the east side of CR 434 from

Franklin Street to a point some 500 feet south, near the Oviedo Motor Lodge entranceway (see Figure 1).

BACKGROUND RESEARCH

Florida Master Site File Review

A review of GIS data from the Florida Master Site File (FMSF) dated July 2009 indicates that two NRHP-listed historic districts (8SE1770 and 8SE1771), one potentially NRHP-eligible historic railroad (8SE2138), one potentially NRHP-eligible structure (8SE68), and 83 historic structures are located within one quarter-mile of the project APE (see Figure 2, attached). NRHP-listed and NRHP-eligible resources are summarized in Table 1. No previously recorded cultural resources have been identified within the project APE.

Table 1. NRHP-listed and NRHP-eligible resources within 0.25 miles of the project APE.

FMSF Site No.	Name	Resource Type	NRHP Status
8SE68	First Baptist Church	Historic Structure	Potentially eligible
8SE1770	R.W. Estes Celery Co. Precooler District	Historic District	Listed in 2001
8SE1771	Nelson & Company Historic District	Historic District	Listed in 2001
8SE2138	CSX Railroad	Historic Landscape	Potentially eligible

Historic Map and Aerial Photograph Review

Historic maps and aerial photographs of Seminole County were reviewed in order to identify human activity within the APE (Township 21 South, Range 31 East, Sections 10 and 16). The earliest available maps of detail are the General Land Office Survey (GLOS) maps created by state land surveyors in the first half of the nineteenth century. GLOS maps were created of the project area in 1844 and again in 1852. Neither map indicates land ownership nor shows settlements, trails, or other signs of human activity within the project area (GLOS 1844; GLOS 1852).

Beginning in the 1930s, the United States Department of Agriculture (USDA) took aerial photographs of the state of Florida. Photographs were taken of the project area in 1940 and then again in 1957. The 1940 aerials show a moderate amount of development in the Oviedo area. However, the APE and surrounding areas are dominated by citrus groves and cleared agricultural lands. The Seaboard Airline Railroad is visible running southwest to northeast just south of the project area, as well as the Atlantic Coastline Railroad, which runs in a general northwest-to-southeast direction. A group of small structures is located just north of the project area, and they appear to be related to citrus cultivation operations. The land within the project area is cleared, aside from the extreme northern portion, which is wooded. SR 434 is visible running along the western edge of the APE. There are no structures or man-made features shown within the APE (USDA 1940). Aerial photographs taken in 1957 show no significant developments (USDA 1957).

SURVEY RESULTS

The southern half of the APE is heavily forested with secondary growth. Near the midpoint of the APE, an area to the east has been cleared of vegetation. A private residence (8SE2256) is located east of the APE at the intersection of SR 434 and Franklin Street. The APE near this intersection has been disturbed by the installation of water and electric utility lines. A total of five shovel tests were excavated along the east side of SR 434 between Franklin Street and the Oviedo Motor Lodge (see Figure 3, attached).

The southernmost shovel test revealed very dark gray sandy loam from the surface to 16 inches below surface (40 centimeters below surface [cmbs]), beneath which was gray sand. Water was encountered at 20 inches (50 cmbs). The next two shovel tests placed to the north at 20-meter intervals exhibited similar profiles.

The fourth shovel test revealed dark gray sandy loam to 18 inches below surface (45 cmbs), beneath which was dark gray loam mottled with light gray-brown loam to 25 inches (65 cmbs). Limestone fill material was encountered in this stratum, at the bottom of which was water.

The northernmost shovel test revealed very dark gray sand to 2 inches below surface (5 cmbs), yellow-brown sand to 12 inches (15 cmbs), dark gray sand to 24 inches (60 cmbs), and gray sand to 31 inches (80 cmbs). This test was terminated at 31 inches due to impenetrable roots.

No artifacts were recovered from any of the five shovel tests excavated within the SR 434 sidewalk APE. No archaeological sites or occurrences were identified as a result of the subsurface or pedestrian surveys of the project APE. Furthermore, no historic structures or other historic fabric were located within the project APE. A Florida Master Site File Survey Log Sheet was completed for this project (attached).

CONCLUSIONS

This technical memorandum details the results of a Cultural Resource Assessment Survey (CRAS) of one area of proposed sidewalk along the east side of State Road (SR) 434 in the City of Oviedo in Seminole County, Florida. This project was done in support of proposed improvements to SR 434 and SR 426, including road widening and the construction of stormwater facilities and new sidewalks.

Five shovel tests were excavated within the SR 434 sidewalk APE. No artifacts were recovered from any of the five tests. No archaeological sites or occurrences were identified as a result of the subsurface or pedestrian surveys of the project APE. Furthermore, no historic structures or other historic fabric were located within the project APE. No further cultural resource work is recommended.

REFERENCES CITED

Archaeological Consultants, Inc. (ACI)
2004 *A Cultural Resource Assessment Survey, SR 426/CR 419 From Pine Avenue to Lockwood Boulevard in Oviedo, Seminole County, Florida.* FMSF Survey No. 12937. On file at the Florida Division of Historical Resources.

General Land Office Survey (GLOS)
1844 Township 21 South, Range 31 East. Electronic document, www.labins.org, accessed 26 August 2009.
1852 Township 21 South, Range 31 East. Electronic document, www.labins.org, accessed 26 August 2009.

Southeastern Archaeological Research, Inc. (SEARCH)
2009 *Cultural Resource Assessment Survey of Six Ponds along State Road 426 in Seminole County, Florida.* FMSF Survey No. TBD. On file at the Florida Division of Historical Resources and SEARCH, Newberry, FL.

United States Department of Agriculture
1940 Aerial Photographs: Seminole County. On file at the University of Florida Map and Imagery Library, Gainesville, FL.
1957 Aerial Photographs: Seminole County. On file at the University of Florida Map and Imagery Library, Gainesville, FL.

Attachments

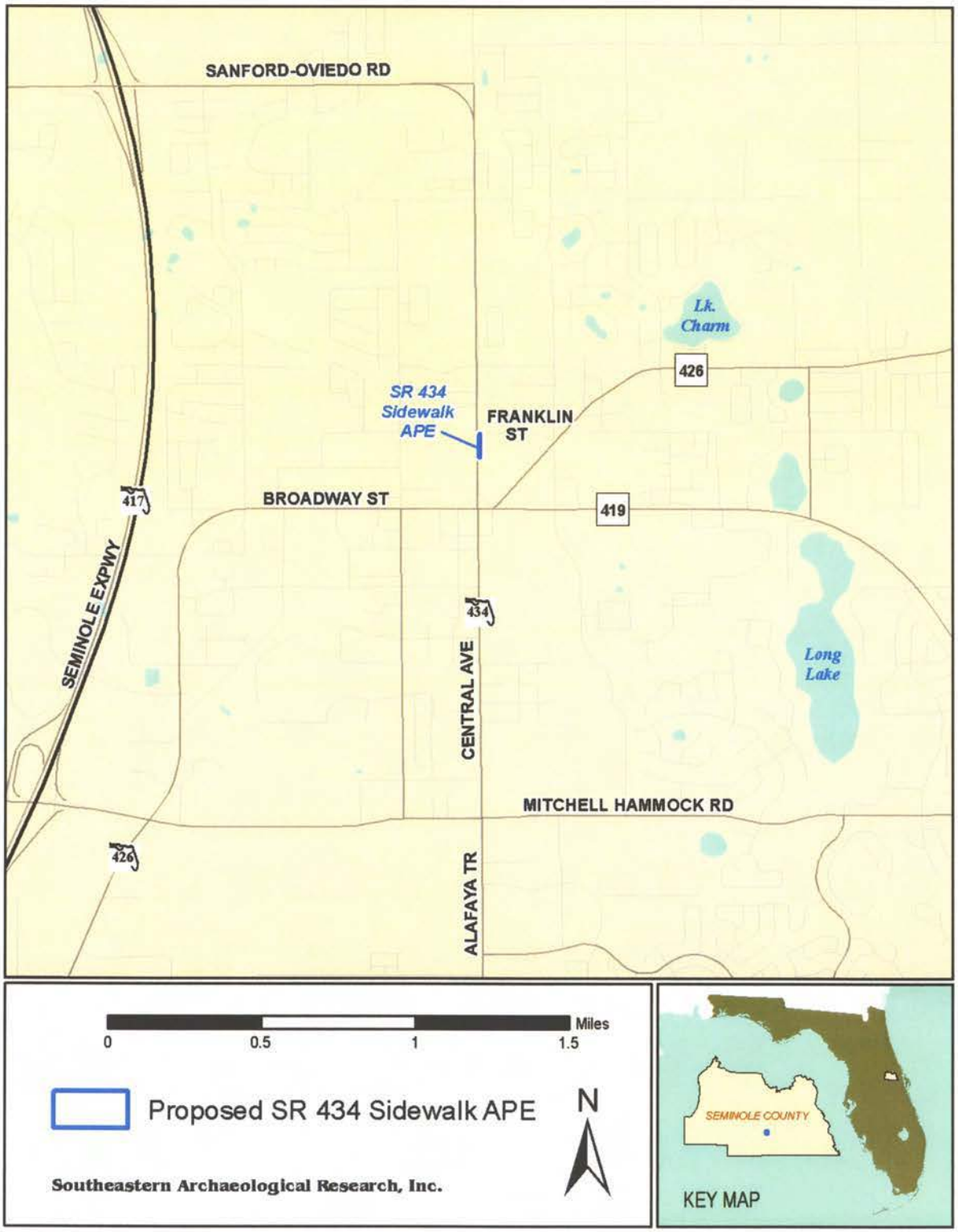


Figure 1. Location of the proposed SR 434 sidewalk APE in Seminole County, Florida.

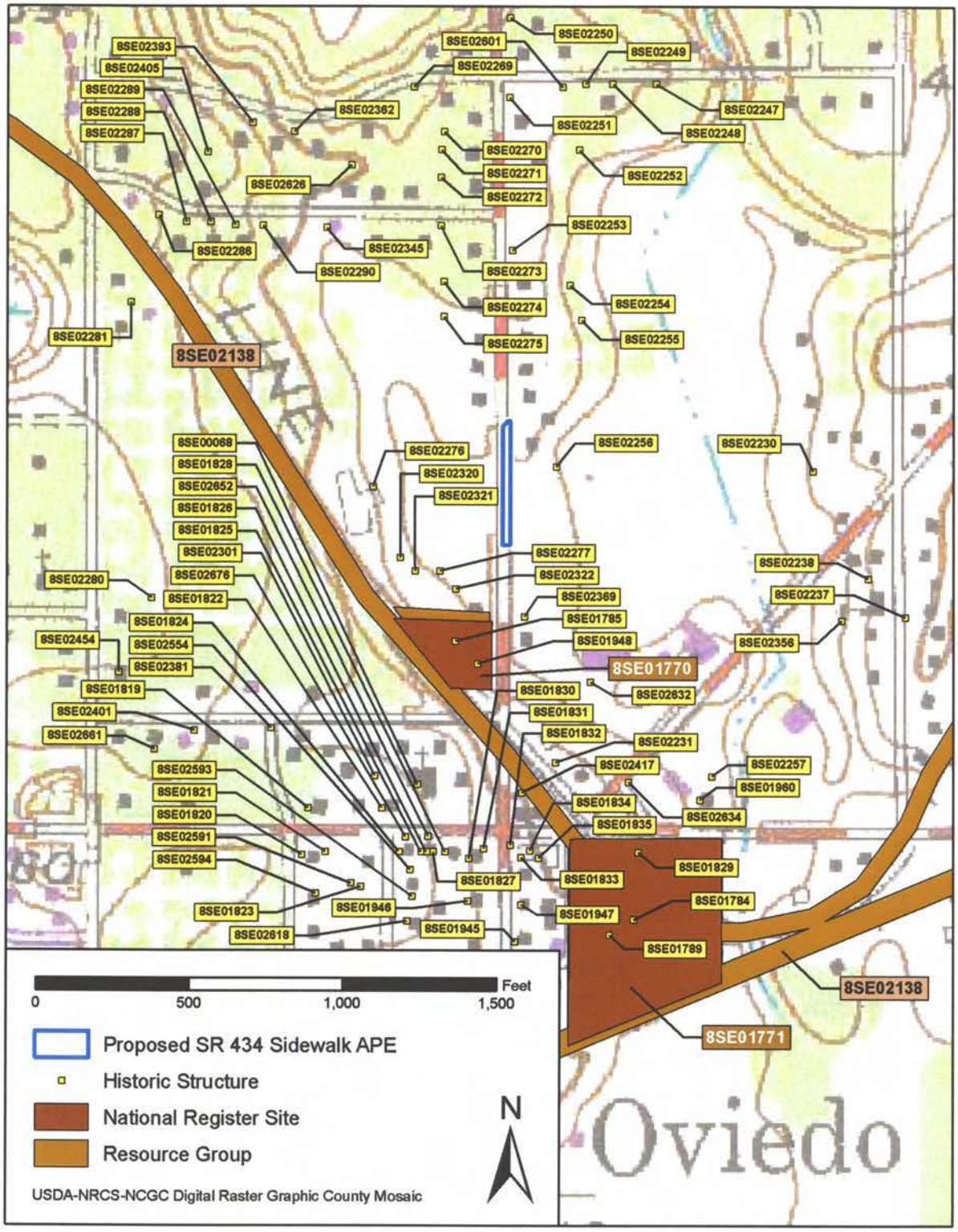


Figure 2. Previously recorded cultural resources within one quarter-mile of the SR 434 APE, Seminole County, Florida.

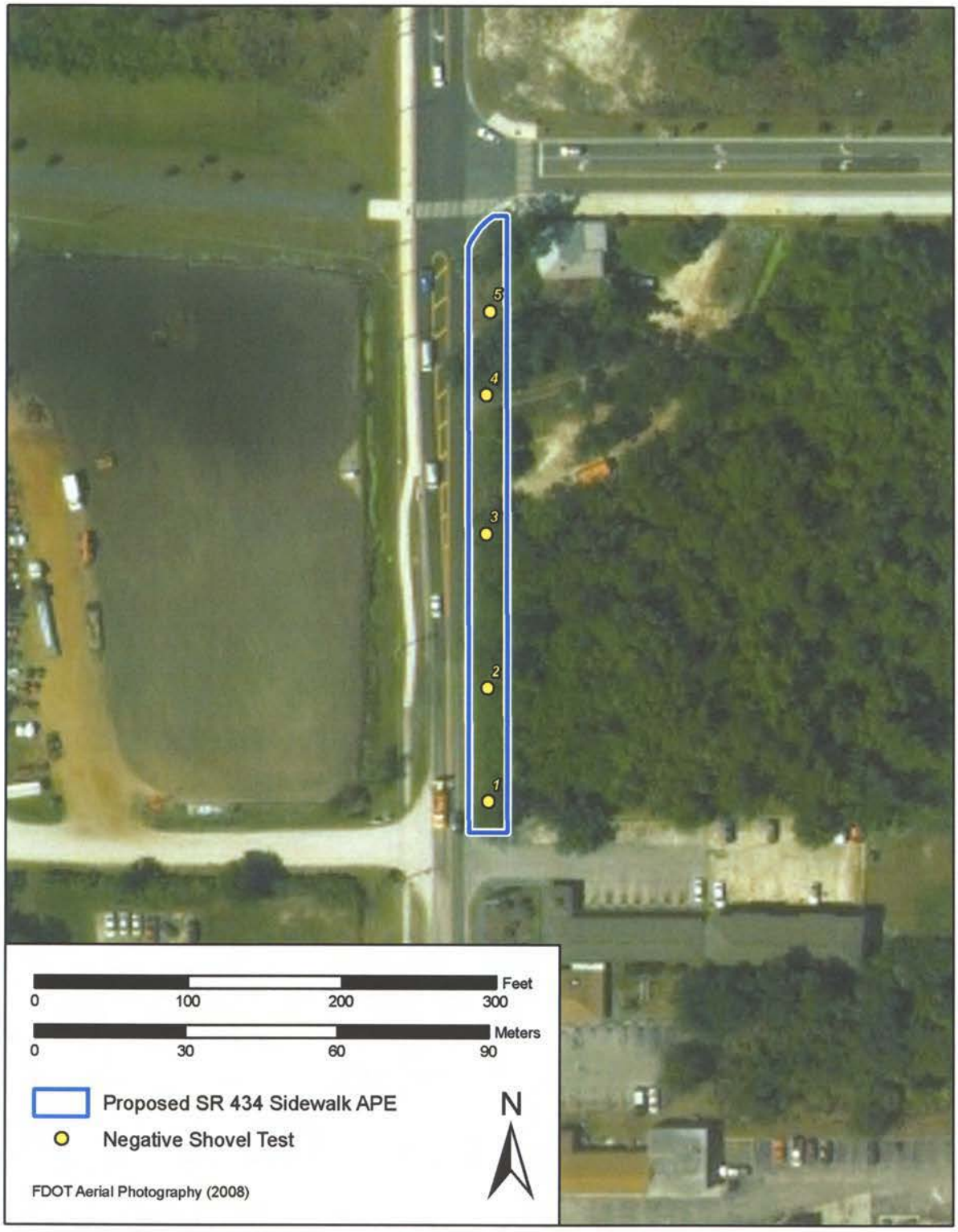
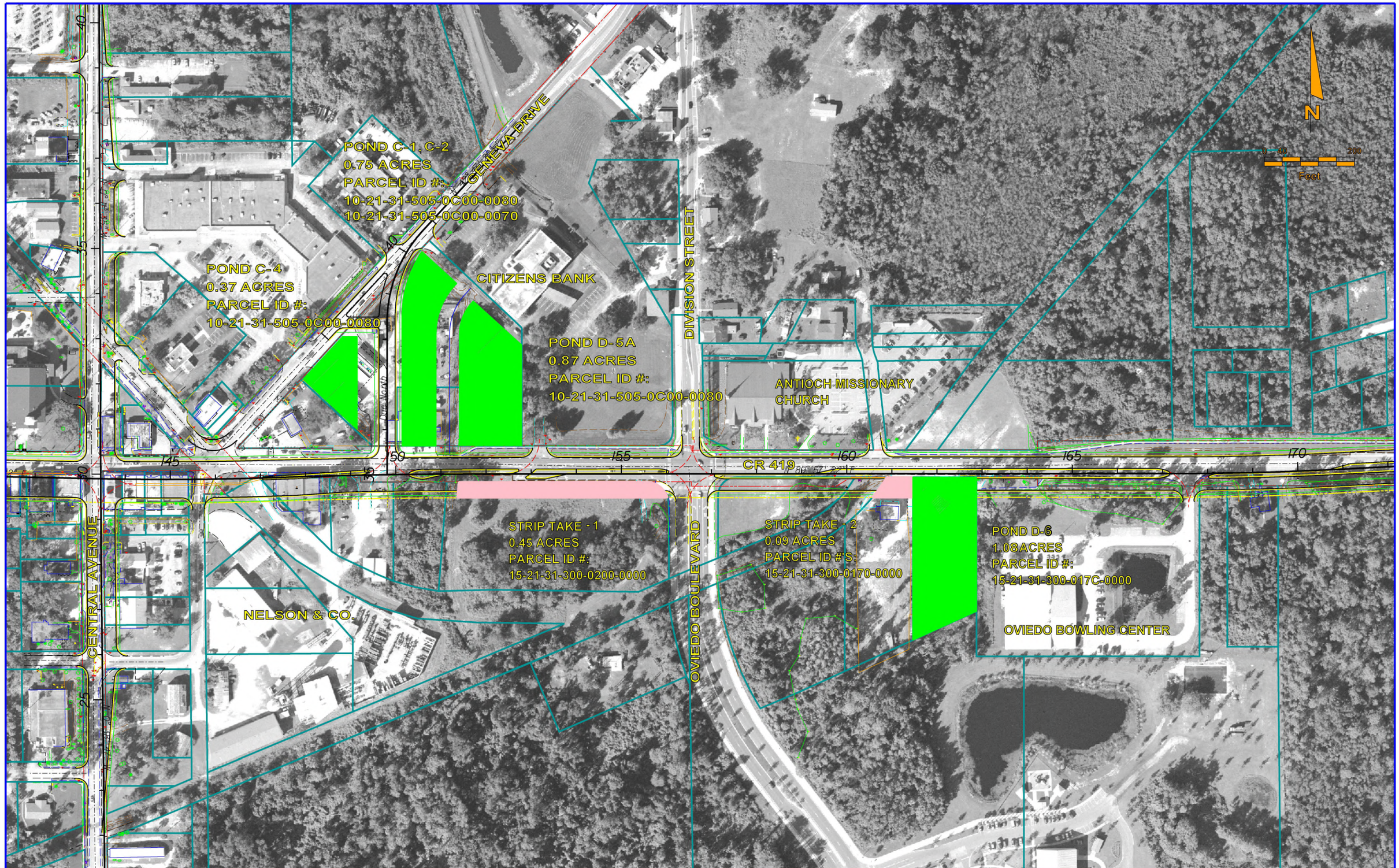


Figure 3. Shovel test locations within the proposed SR 434 sidewalk APE, Seminole County, Florida.

APPENDIX 7 – Approved Pond Sites for Basins C and D

(January 2009)



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Inwood consulting engineers
Certificate No. 7074
870 Clark Street Oviedo, FL 32765

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

SEMINOLE COUNTY
ENGINEERING DIVISION

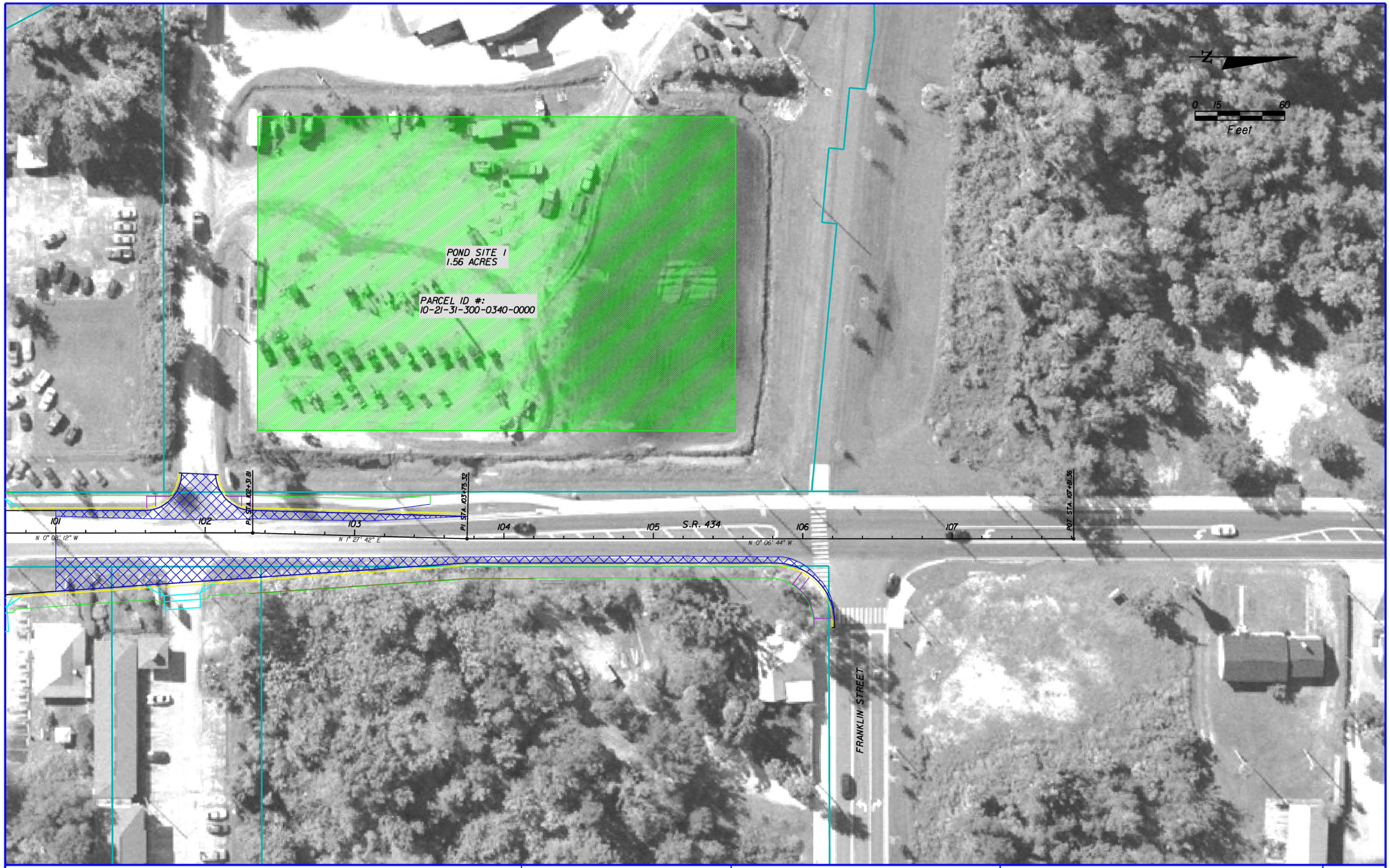
ROAD NO.	COUNTY CIP NO.	FINANCIAL PROJECT ID
SR 426/CR 419	80000005	415030-1-38-01

ALTERNATIVE A
PONDS C-1, C-2, C-4, D-5A, D-6 & STRIP TAKES 1, & 2

SHEET NO.

6/10/2008 8:56:16 AM

APPENDIX 8 – PD&E Re-evaluation Alternative Pond Sites



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Inwood consulting engineers

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

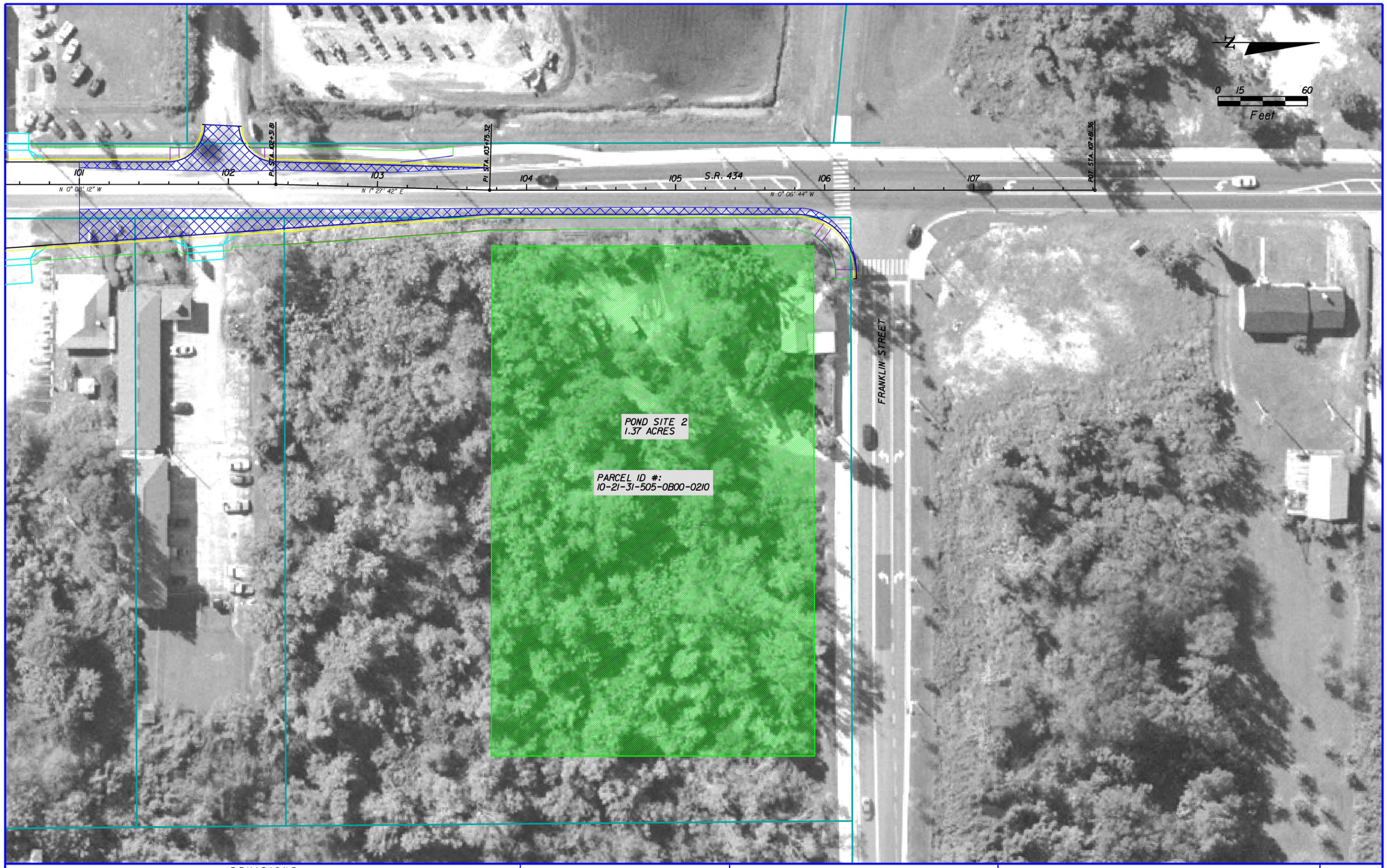
SEMINOLE COUNTY
ENGINEERING DIVISION

ROAD NO.	COUNTY CIP NO.	FINANCIAL PROJECT ID
SR 426/CR 419	80000005	415030-1-38-01

POND SITE 1

SHEET NO.

scarrigan 8/23/2010 10:48:33 AM F:\Projects\SEM-030-01\admin\Drainage\SEM-030-05\PDPLRD02.DGN



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Inwood consulting engineers

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

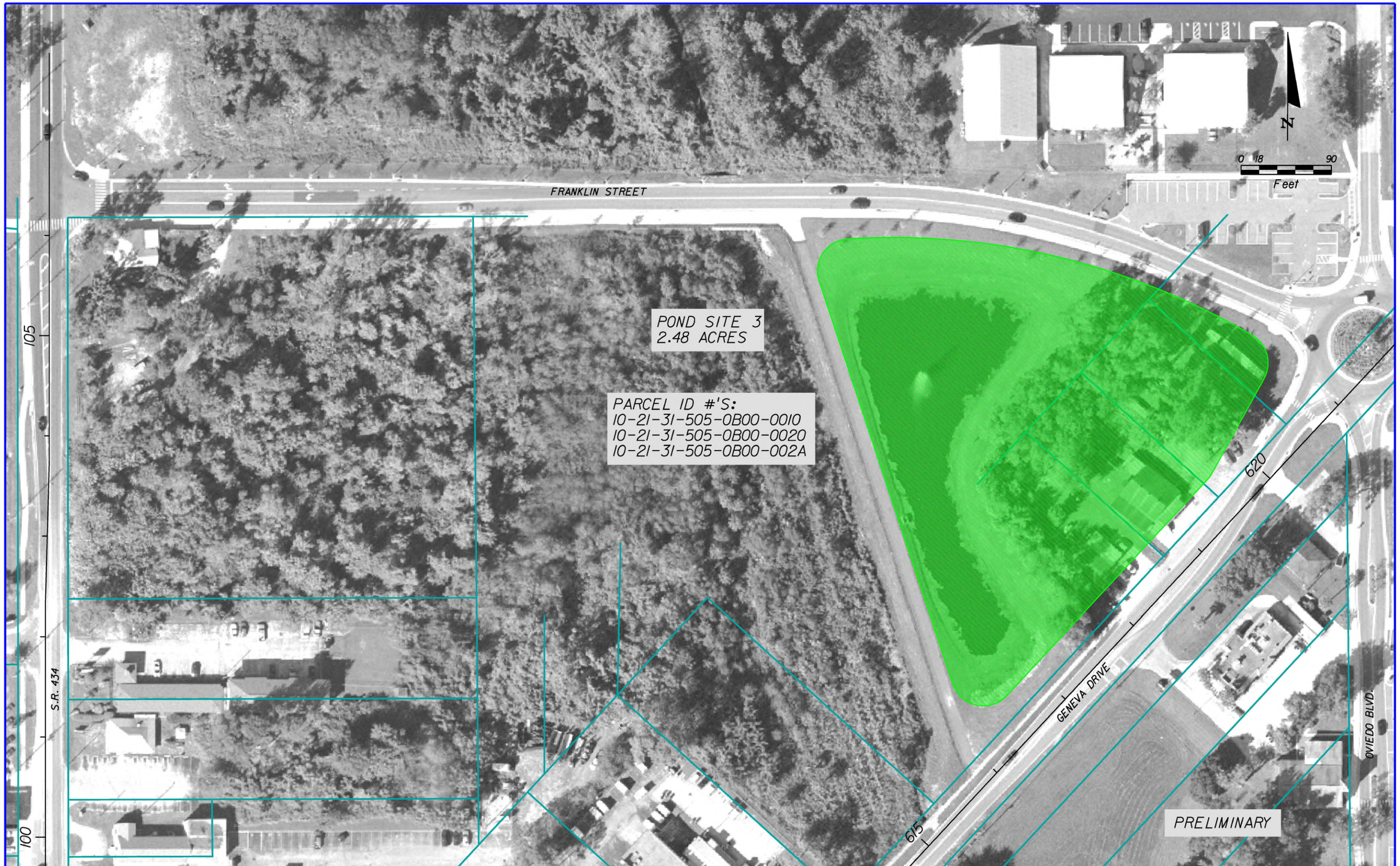
SEMINOLE COUNTY
ENGINEERING DIVISION

ROAD NO.	COUNTY CIP NO.	FINANCIAL PROJECT ID
SR 426/CR 419	80000005	415030-1-38-01

POND SITE 2

SHEET NO.

scarrigan 8/23/2010 10:48:41 AM F:\Projects\SEM-030-01\admin\Drainage\SEM-030-05\PDPLRD03.DGN



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Inwood consulting engineers

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

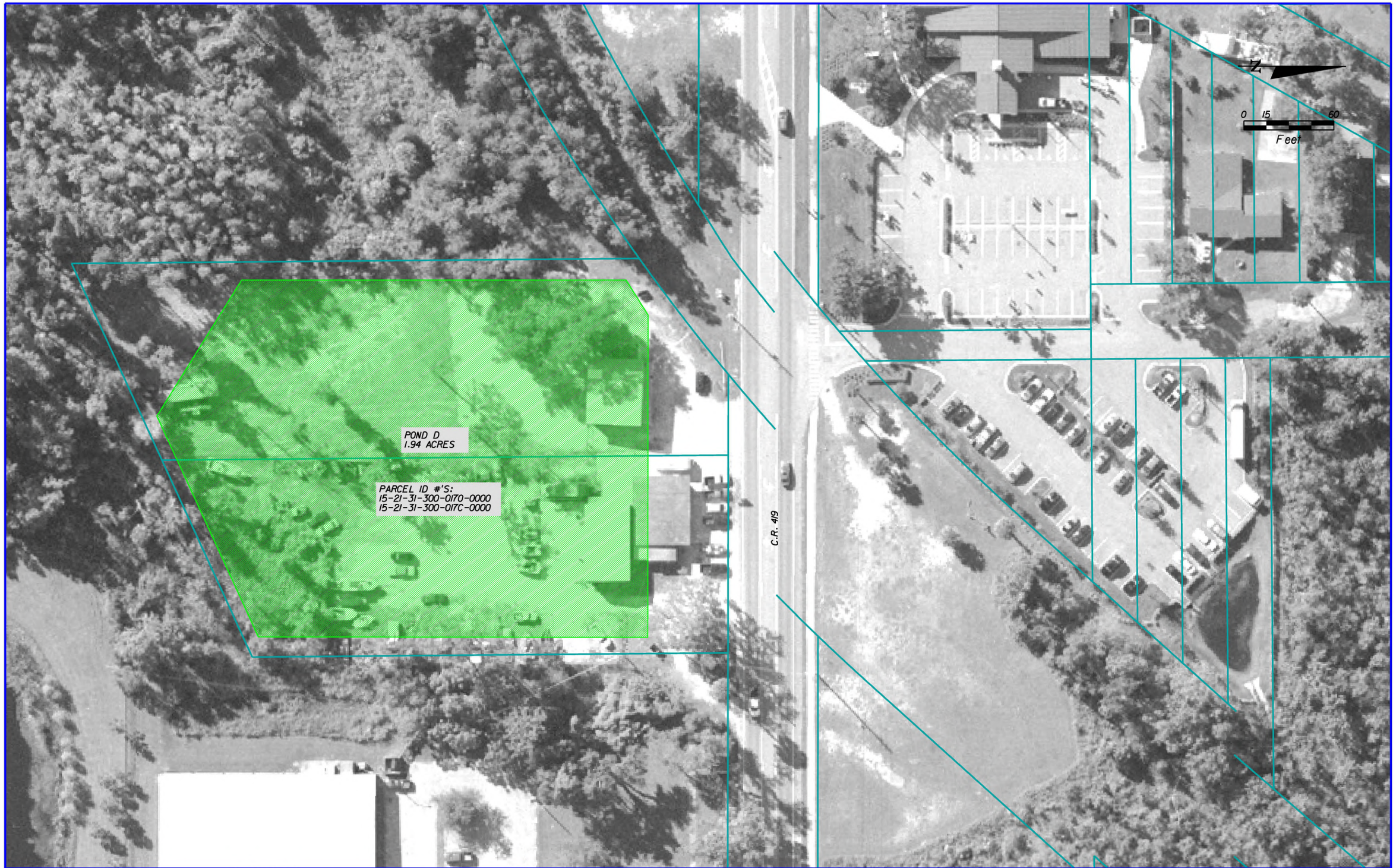
SEMINOLE COUNTY
ENGINEERING DIVISION

ROAD NO.	COUNTY CIP NO.	FINANCIAL PROJECT ID
SR 426/CR 419	80000005	415030-1-38-01

POND SITE 3

SHEET NO.

scarrigan 9/23/2010 3:07:01 PM F:\Projects\SEM-030-01\admin\Drainage\SEM-030-05\PDPLRD06.DGN



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Inwood consulting engineers

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

SEMINOLE COUNTY
ENGINEERING DIVISION

ROAD NO.	COUNTY CIP NO.	FINANCIAL PROJECT ID
SR 426/CR 419	80000005	415030-1-38-01

POND D

SHEET NO.

scarrigan 8/23/2010 10:48:58 AM F:\Projects\SEM-030-01\admin\Drainage\SEM-030-05\PDPLRD05.DGN

APPENDIX 9 – Approved PD&E Re-evaluation Form

(November 2010)

Tushar/PM

Florida Department of Transportation
PROJECT REEVALUATION FORM

I. GENERAL INFORMATION (Originally approved document)

a. Reevaluation Phase: Design Change

b. Document Type and Date of Approval: Type II C.E. 6/13/07

c. Project Numbers: TCSP 035 U (Federal Aid) 415030-1 (FPN No.)

d. Project Local Name, Location and limits: SR 426/CR419 (Broadway Street) from Pine Avenue to west of Lockwood Boulevard

e. Segment(s) of Highway Being Advanced: Design Change: SR 426/CR419 (Broadway Street) Intersection with SR 434 (415030-2)

f. Name of Analyst(s) Kristee Booth & Stephen Tonjes

g. County: Seminole

II. CONCLUSION AND RECOMMENDATION

The above environmental document has been reevaluated as required by 23 CFR 771 or the Project Development and Environment Guidelines of FDOT, and it was determined that no substantial changes have occurred in the social, economic, or environmental effects of the proposed action that would significantly affect the quality of the human environment. Therefore, the original Administration Action remains valid.

It is recommended that the project identified herein be advanced to the next phase of project development.

REVIEWER SIGNATURE BLOCK

Environmental Administrator — Date: 11/8/10

III. FHWA CONCURRENCE BLOCK

Federal Highway Administration, Division Administrator — Date: 11/22/10

IV. CHANGE IN IMPACT STATUS OR DOCUMENT COMPLIANCE

	YES	NO	COMMENTS
A. SOCIAL IMPACTS			
1. Land Use Changes	[ ]	[X]	
2. Community Cohesion	[ ]	[X]	
3. Relocation Potential	[ ]	[X]	
4. Community Services	[ ]	[X]	
5. Title VI Considerations	[ ]	[X]	
6. Controversy Potential	[ ]	[X]	
7. Utilities and Railroads	[ ]	[X]	
B. CULTURAL IMPACTS			
1. Section 4(f) Lands	[ ]	[X]	
2. Historic Sites/Districts	[ ]	[X]	
3. Archeological Sites	[ ]	[X]	
4. Recreation Areas	[ ]	[X]	
5. Pedestrian/Bicycle Facilities	[ ]	[X]	
C. NATURAL ENVIRONMENT			
1. Wetlands	[ ]	[X]	
2. Aquatic Preserves	[ ]	[X]	
3. Water Quality	[ ]	[X]	
4. Outstanding Fla. Waters	[ ]	[X]	
5. Wild/Scenic Rivers	[ ]	[X]	
6. Floodplains	[ ]	[X]	
7. Coastal Zone Consistency	[ ]	[X]	
8. Coastal Barrier Island	[ ]	[X]	
9. Wildlife and Habitat	[ ]	[X]	
10. Farmlands	[ ]	[X]	
11. Visual/Aesthetics	[ ]	[X]	
D. PHYSICAL IMPACTS			
1. Noise	[ ]	[X]	
2. Air	[ ]	[X]	
3. Construction	[ ]	[X]	
4. Contamination	[ ]	[X]	
5. Navigation	[ ]	[X]	

V. EVALUATION OF MAJOR DESIGN CHANGES AND REVISED DESIGN CRITERIA

(e.g.) Typical Section Changes, Alignment Shifts, Right of Way Changes, Bridge to Box Culvert, Drainage Requirements, Revised Design Standards).

The design segment SR 426/CR 419 intersection with SR 434 (415030-2) is being reevaluated for design change. This design segment is being designed and funded by Seminole County as Phase 1 Design of the PD&E Study 415030-1, and is at 90% design plans. There are a few design changes:

1) The previous design change to realign CR 426 will not be completed. This has been eliminated from the design due to new contamination issues that would be encountered.
2) To connect to the trails, an 8' sidewalk and bike lane will be extended to Franklin Street along the west side of SR 434 and will connect to the existing sidewalk on the south side of Franklin Street; this is shown in the plans. This has been cleared for any environmental issues, including SHPO clearance dated 9/28/10.
3) A right-of-way change for one pond site. The new pond site (Site 3) and its alternatives have been environmentally cleared, including SHPO clearance dated 9/28/10.

OTHER DESIGN SEGMENTS:

The design segment 415030-3, SR 426/CR 419 from Pine Avenue to Avenue B, is being designed and funded by Seminole County as Phase 2 Design of the PD&E Study 415030-1, and is at 15% plans.

415030-4: SR 426/CR 429 from Avenue B to west of Lockwood Road is not currently being designed by the Seminole County but is Phase 3 Design of the PD&E Study 415030-1.

VI. MITIGATION STATUS AND COMMITMENT COMPLIANCE

Mitigation status:

Impacts to 0.1 acres of wetlands will require mitigation. Mitigation will be provided through off-site wetland preservation at the Brio Property.

Commitment Compliance:

The FDOT has made numerous commitments for the proposed SR 426/CR419 widening project within the Type II Categorical Exclusion (dated 6/13/07); see the attached pages for details. See below for commitment compliance status.

1. During the design phase, the designing agency will re-evaluate reasonable and feasible noise abatement measures at the impacted locations. The proposed improvement includes the recommendation of noise abatement measures (noise walls) in the vicinity of the Kingsbridge East and Waverly Woods subdivisions. The construction of noise abatement measures will be contingent upon the detailed noise analysis to be conducted during the final design process supporting the need for abatement.
   The detailed noise analysis shall determine:

a. Reasonable cost analyses show that the economic cost of the barrier(s) will not exceed the guidelines;
b. Community input regarding desires, types, heights and locations of barrier has been solicited;
c. Preferences regarding compatibility with adjacent land uses, particularly as addressed by officials having jurisdiction over such land uses has been noted;
d. Safety and engineering aspects, as related to the roadway user and the adjacent property owner have been reviewed; and
e. Any other mitigating circumstances found in Section 17-4.6.1 of the PD&E Manual have been analyzed.

(*Applies to design segment 415030-4 which is not in design yet but will be handled during that phase.*)

2. During the design phase, the designing agency shall evaluate enhancements as necessary related to recreational trail connectivity (tie-ins to the Cross Seminole Trail and other state and/or local trail facilities). (*Applies to 415030-2. To connect to the trails, an 8' sidewalk and bike lane will extend to Franklin Street along the west side of SR 434 and will connect to the existing sidewalk on the south side of Franklin Street; this is shown in the plans.*)

3. The designing agency shall consider aesthetic enhancements including the use of stamped asphalt pavement at key intersections (Pine Avenue, North Lake Jessup Avenue, Central Avenue/SR 434, and Oviedo Boulevard) and evaluating landscaping opportunities throughout the corridor. Design and construction of enhancements may require local funding and maintenance. (*This applies to all segments but will not be completed in Phase 1. It will be addressed during Phase 2- this corresponds to design segment # 415030-3.)*

   The design agency will include mitigation for impacts to the oak trees in front of the Lawton House, which is a historic property eligible for listing in the National Register of Historic Places. This involves the replacement of the acquired oak trees in front of the Lawton House with live oak trees of approximately 100 gallons at the time of construction. (*This applies to 415030-3 that is Phase 2, and will be handled as that project advances.*)

4. FDOT's Environmental Management Office will be given notice of the Pre-Construction Conference in order to implement the United States Fish & Wildlife Service (USFWS) Standard Protection Measures for the eastern indigo snake during the construction phase of this project (Appendix A). (*Applies to 415030-3 and 415030-4. The appropriate protection notes will be added to the design plans and the education plan will be provided during the Pre-Construction Conference.*)

5. If a portion of the Nelson & Company Property is planned to be acquired, or if the project is near the property and excavation and/or de-watering for construction is planned, then the designer shall determine if additional contamination assessment and possible remedial action may be needed. (*Applies to 415030-3, further assessment will occur at the time*

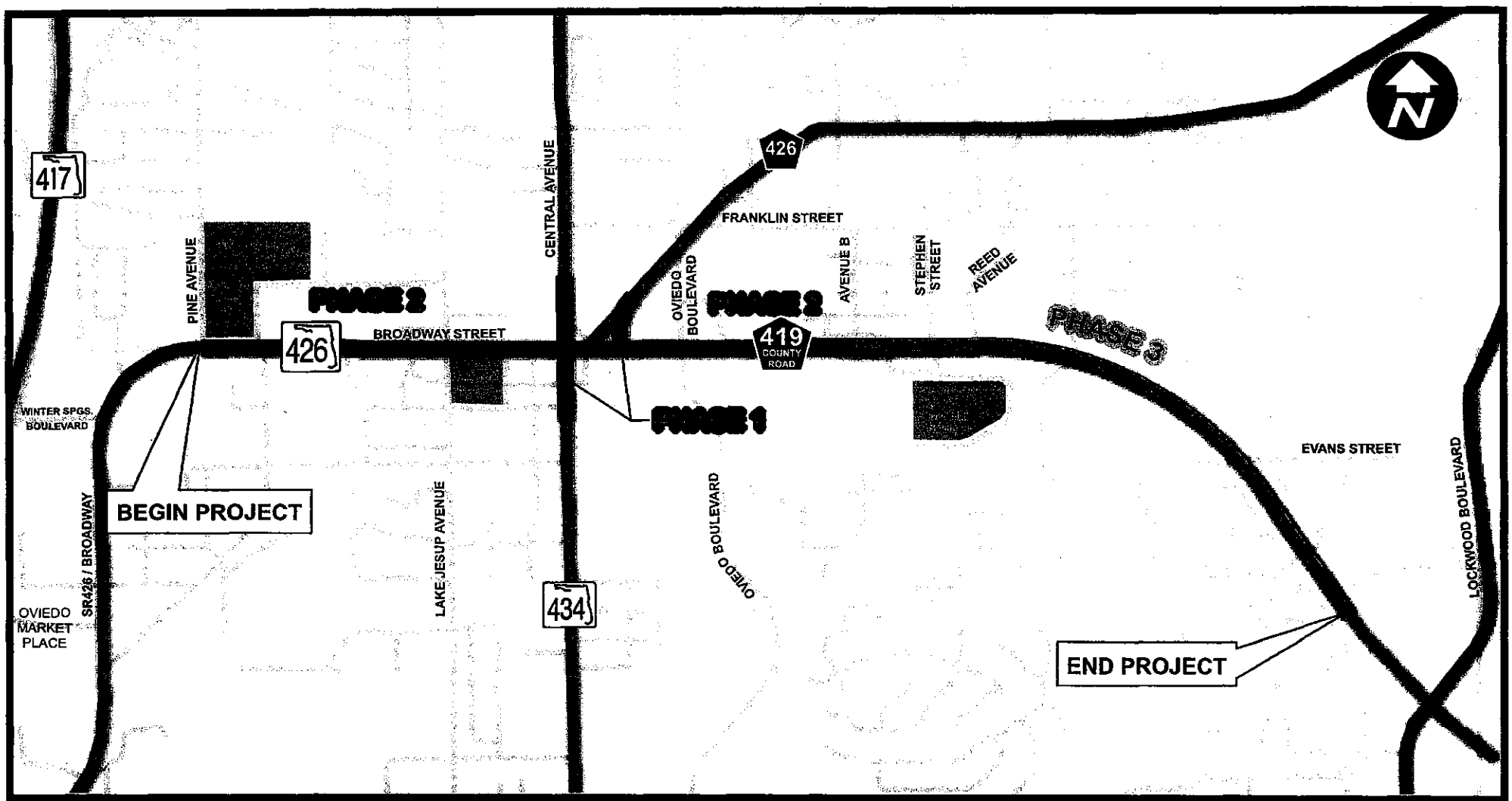
Phase 2 is carried out and, if necessary, remediation will be proposed.)

VII. PERMITS STATUS

The St. Johns River Water Management District Individual Environmental Resource Permit (40-117-120191-1) was applied for 3/16/09 and is in the RAI process.

The U.S. Army Corps of Engineers Nationwide Permit [SAJ-2009-01077 (NW-AWP)] was obtained for 5/15/09.

The Environmental Protection Agency NPDES Permit will be secured prior to construction.



OVIEDO - FLORIDA

STATE ROAD 426/ COUNTY ROAD 419 WIDENING
FROM PINE AVENUE TO WEST OF LOCKWOOD BOULEVARD