NEPTUNE ROAD WIDENING POND SITING REPORT

LIMITS OF PROJECT WIDENING: FROM PARTIN SETTLEMENT ROAD TO U.S. HIGHWAY 192 (13TH STREET)

FPID: 445415-1
Federal Aid Project Number: N/A



OSCEOLA COUNTY, FLORIDA

PREPARED FOR
Osceola County
1 Courthouse Square
Suite 3100
Kissimmee, FL 34741

February 2020

CERTIFICATION BY A REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME. N	eptune Road widen	iing – Pona Siting Re	port	_
HEREBY CERTIFY THAT THE SUPERVISION AND DIRECTION STATE OF FLORIDA IS AFFIXED	OF THE UNDERSIGNED, WHO	NTAINED IN THIS DOCUMENT OSE SEAL AS A REGISTERED PR	WAS PREPARED UNDER THEOTERSIONAL ENGINEER IN TH	∃E ∃E
NAME (PLEASE PRINT):	JOHN ERIC MOOD	Y, P.E.		
COMPANY NAME:	OSCEOLA ENGINE	ERING, INC.	<u> </u>	
ADDRESS:	1003 FLORIDA AVE	NUE	<u> </u>	
	ST. CLOUD, FLORI	DA 34769	_	
TELEPHONE NUMBER:	(407) 891-0452		_	
		DATE:	//	
	TURE OF ESSIONAL:			
FLORII NUMBI	DA REGISTRATION ER:	489	927	

NEPTUNE ROAD POND SITING REPORT JANUARY 2020 TABLE OF CONTENTS

SECTION 1: EXECU	ITIVE SUMMARY	1
1.1: Narrative		1
1.2: Pond Eval	uation Matrix	1
1.3: Major Wate	ershed, OFW, Impairment, & Outfall	2
1.4: Project Su	rvey Vertical Datum	2
SECTION 2: INTROI	DUCTION	2
2.1: Introductio	n and Purpose	2
2.2: Scope of A	Analysis	3
SECTION 3: POND S	SITE LOCATIONS	3
3.1: Roadway F	Profile and its Impact on Pond Location	3
3.2: Pond Site	Selection Criteria	3
3.3: Pond Loca	ation 1A	5
3.4: Pond Loca	ation 1B	6
3.5: Pond Loca	ation 2A	7
3.6: Pond Loca	ation 2B	8
3.7: Pond Loca	ation 2C	9
3.8: Pond Loca	ation 3A	10
3.9: Pond Loca	ation 3B	11
3.10: Pond Loc	cation 4A	12
3.11: Pond Loc	cation 4B	13
3.12: Pond Loc	cation 5A	14
3.13: Pond Loc	cation 5B	15
3.14: Pond Loc	cation 5C	16
3.15: Regional	Pond Considerations	17
3.16: Floodplai	n Compensation	17

SECTION 4: REQUIRED PERMITTING & POND DESIGN CRITERIA	17
SECTION 5: EXISTING & PROPOSED DRAINAGE CONDITIONS	18
5.1: Existing Drainage Conditions	18
5.2: Proposed Drainage Conditions	19
5.3: Tailwater	19
SECTION 6: SUMMARY OF FINDINGS & CONCLUSIONS	19

SECTION 7: APPENDICES

Pond Sizing Computations

Pond Siting Matrix

Figures

1 Location Map

2A-F Pond Locations

- 3 Soils Map
- 4 USGS Map
- 5 FEMA Floodplain Map
- 6 Outfall Location Map
- 7 Drainage Map

Tailwater Data Source Documentation

Pond Ranking Supporting Data

- Cultural Resource Evaluation Report
- Natural Resource Evaluation Report
- Contamination Screening Evaluation Report
- Geotechnical Investigation Report
- Cost information (private please contact FDOT project manager)



NEPTUNE ROAD DRAFT POND SITING REPORT

1. EXECUTIVE SUMMARY

1.1. Narrative

Osceola County is preparing a roadway capacity improvement of Neptune Road. The limits of this project are from US-192 and Partin Settlement Road which encompasses 3.9 miles of roadway. The project is located in sections 4 and 5 of Township 26S and Range 30E. Please refer to Figure 1 for the location of the project. This project will most notably include the widening of the roadway. This roadway corridor spans a mix of commercial and residential land uses.

Three typical sections options were developed. All three typical sections include a 4 lane divided highway with 11' travel lanes, a 4' bike lane for each direction of travel, and a 12' wide shared use path for each direction of travel. The distinguishing characteristic of the typical section options is the width and location of the greenspace.

This report provides a preliminary evaluation of potential pond sites. A summary of the evaluations is provided in the Pond Evaluation Matrix. Multiple pond locations may be needed to satisfy the stormwater management requirements; a total pond acreage of approximately 13 acres will be needed. The locations of the potential pond sites are shown in Figure 2.

1.2. Pond Evaluation Matrix

Please refer to Table 1 – Pond Siting Matrix for a matrix table showing a summary of the potential pond sites. Information from the following documents was used to evaluate the pond sites and the environmental effects of each site:

- Wetlands Evaluation Report, Neptune Road
- Endangered Species Biological Assessment Report, Neptune Road
- Cultural Resource Assessment Survey of the Neptune Road PD&E
- Level 1 Assessment, Contamination Screening Evaluation Report, Neptune Road

These documents will be available in the project files.

Pond site rankings were determined by considering the pond location, quantity of parcels that would need to be acquired, wetland impacts, floodplain impacts, habitat impacts, archeological impacts, historical site impacts, social impacts, utility conflicts, and contamination risk. As can be seen from the matrix, there are multiple ponds given the ranking of 1. It is estimated that the project will need a pond for each drainage basin. The ponds in the matrix are numbered by basin and ranked within each basin. Pond Sites 1A, 2C, 3B, 4A, and 5A received the highest rankings; These ponds were on parcels of adequate size with low wetland impact risks. Further in the project, additional analysis will be conducted to better assess the cost of acquisition of the parcels.

1.3. Major Watershed, OFW, Impairment & Outfall

Neptune Road is a part of the overall Lake Okeechobee watershed with positive outfall to the Gulf of Mexico. Lake Okeechobee is a nutrient impaired water body. Consequently, any development in this watershed is required to provide 50% additional stormwater treatment volume in the associated stormwater ponds. This project does not discharge stormwater to an Outstanding Florida Water (OFW).

1.4. Project Survey Vertical Datum

A design survey was performed in the National Geodetic Vertical Datum of 1929 (NGVD29). Elevations found in the future roadway and stormwater management designs will reference this vertical datum. According to the US Department of Commerce National Oceanic Atmospheric Administration the conversion to the North American Vertical Datum of 1988 (NAVD88) is as follows: NGVD29 – 0.94 ft = NAVD88.

2. INTRODUCTION



Photo 1: Neptune Road at the Peg Horn Slough

2.1. Introduction and Purpose

Osceola County proposes to improve Neptune Road between US-192 and Partin Settlement Road. These improvements will include the widening of the roadway. This project will improve the capacity of this roadway section. Please refer to Figure 1 for a map showing the location of the proposed project. A stormwater management system, including stormwater ponds, will be needed to prevent adverse effects to local waterways and comply with the requirements of the South Florida Water Management District (SFWMD) and Osceola County. These stormwater ponds will provide peak stormwater discharge attenuation and improve the water quality of this stormwater discharge. The purpose of this study is to identify potential pond site locations.

2.2. Scope of Analysis

The scope of this analysis is to prepare a pond siting report that includes locating potential pond sites and outlining the impacts and selection criteria for these potential sites.

3. Pond Site Locations

3.1. Roadway Profile and its Impact on Pond Location

The project corridor has a relatively flat profile with minor elevation relief. Since the existing roadway is a rural section the roadway profile has low points at the major cross drain locations. This roadway profile will be maintained if possible. The roadway profile will not significantly dictate pond locations due to the implementation of a closed stormwater system and the lack of elevation difference across the profile.

3.2. Pond Site Selection Criteria

Ponds sites were selected with consideration of the following criteria

- Parcel size and quantity
- Wetland impacts
- Floodplain impacts
- Habitat impacts
- Archeological impacts
- Historical impacts
- Social impact
- Utility conflicts
- Contamination Risk

Parcel Size and Quantity: A major factor in determining an appropriate pond site is of course location. There are four (4) major crossings/outfalls for the existing Neptune road system. Based on the location of the crossings we will need at least four (4) pond sites. It is important to note that it may not be feasible to cross the C-31 canal with a stormwater pipe to a wet pond. For this reason, the C31 canal basin may need two ponds - one on each side of the canal. Please see Figure 6 for an outfall location map. Proposed ponds will likely need to be wet detention ponds based on the shallow water tables identified in the Preliminary Geotechnical Investigations and indications from the NRCS Soil Survey of Osceola County. A wet pond must be a minimum of 0.5 acres in size to meet the permitting criteria of the South Florida Water Management District (SFWMD) and have an average width of 100 foot at the control water level. Based on preliminary stormwater estimates this project will need approximately 8.5 acres of cumulative pond area. Preliminary pond sizes will be estimates until a stormwater model is developed and specific hydrologic parameters are identified at the pond site locations. Please refer to the computation and appendices section for pond sizing calculations.

The construction of the proposed roadway improvements will introduce additional impervious area and consequent increase in stormwater discharge. Wet detention ponds of the aforementioned sizes will provide the storage volume needed available to attenuate the increased stormwater discharge. A wet detention pond will also provide the necessary reduction in nutrient discharge to the receiving waterbodies.

Wetland Impacts: Wetland impacts were preliminarily evaluated for each site. Wetland determinations were based on observations of the National Wetland Inventory map until a formal Wetland Evaluation Report can be prepared for this project. Please refer to Figure 3 for a soil map Figure 4 for a USGS topographical map of the area. It is recommended that an environmental assessment be performed on each pond site prior to the design and permitting phase of this project.

Flood Plain Impacts: FEMA's Flood Insurance Rate Map (FIRM) (Map No.12097C0090G) was used to determine the limits of the floodplain. Please refer to Figure 5 for a map showing the potential pond site location overlaid on FEMA's FIRM.

Habitat Impacts: An Endangered Species Biological Assessment will be prepared by others for this PD&E Study and the effects to wildlife and listed species is based on a review of this information.

Archeological Impacts: A Cultural Resource Assessment Survey (CRAS) conducted for each pond site location to determine the probability for historic archeological resources.

Historical Impact: The CRAS assessed potential impact to historic sites listed or eligible for listing on the National Register of Historic Places.

Social Impact: The social impacts to the site were defined as any impact that would displace a family from their home, cause impacts to developed land, or impact a parcel with community significant such as a church.

Utility Conflicts: The best available information for existing utilities, and the Utility Assessment Report for this project, will be used to determine the potential of utility conflicts. It is recommended that a utility location survey of each potential pond site be performed during the design process.

Contamination Risk: A Level 1 Assessment Contamination Screening Evaluation Report will be created for the potential pond sites. The contamination risks outlined in this report were considered in the evaluation of each site. The level 1 assessment will be available in the project files.

3.3. Pond Location 1A



Photo 2: Aerial Photo of Pond 1A Location near the intersection of Partin Settlement Road

General Information / Parcel Size: Pond Site location 1 is a full parcel under private ownership. This parcel already contains an excavated pond that could be expanded. This pond is not a permitted pond and is not considered a joint use pond. The parcel acquisition size is 4.5 acres.

Pond Outfall: Utilizing the existing pond at this location could provide stormwater attenuation and nutrient removal for the proposed roadway widening. Outfall from this pond would be into the adjacent Partin Canal.

Topography & Hydrologic Features: This site features an excavated borrow pit that can be expanded and converted to a stormwater management pond.

Pond Access: This parcel currently has access directly from Neptune Road through a 20 foot wide tract/parcel that would also have to be acquired.

Wetland Impacts: A Natural Resource Evaluation report was prepared for this pond site. This report identified the borrow pit as a freshwater marsh with potential impacts. According to the National Wetland Inventory Map there are no identified wetlands within this pond site location.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in both Zone A and Zone X. It is important to note that fill will likely not be needed to be placed in Zone A-100 year floodplain. If fill need to be placed to establish maintenance berms the storage loss could likely be offsite by shifting the berm inward by a foot or two which provides additional floodplain storage on the outside of the pond.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. The Natural Resource Evaluation Report indicated that this pond site includes habitat impacts. Please refer to that report for further discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a high probability for historic archeological resources.

Historical Impacts: The CRAS did not identify a historical site within this pond location

Social Impacts: This pond site does not have any apparent social impact.

Utility Conflicts: There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail. **Contamination Risk:** The contamination risk of this parcel will be discussed in the phase 1 environmental assessment.

3.4. Pond Location 1B

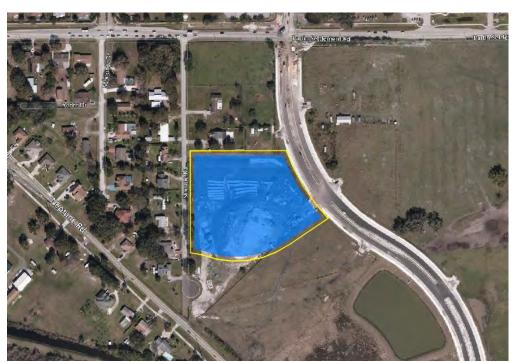


Photo 3: Aerial photograph of pond location 1B near the intersection of Stroupe Road and Neptune Road

General Information / Parcel Size: A pond at this location would involve either the expansion of the pond that is currently designed to serve the Shady Lane Extension project or construction of a separate pond. The green space area within this parcel is over 9 acres with an acquisition requirement of 7.7 acres.

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would discharge into the Partin Canal (Identified in Figure 6).

Topography & Hydrologic Features: There are no notable topographic or hydrologic features or constraints associated with this pond site

Pond Access: This pond will have direct access from Neptune Road or from the future Shady Lane Extension should the pond be an expansion of that pond.

Wetland Impacts: According to the National Wetland Inventory Map and the SFWMD environmental resource permit for the Shady Lane Extension there is an identified wetland near this pond site location, however, there is plenty of upland areas that can be utilized. A Natural Resource Evaluation report was prepared for this pond site and did not indicate wetland or surface water impacts associated with this site.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone X indicating an area outside of the 100 year flood plain.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. No Habitat impacts were identified for this pond site by the Natural Resource Evaluation Report. Please refer to the Natural Resource Evaluation Report for a discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a high probability for historic archeological resources.

Historical Impacts: The CRAS did not identify a historical site within this pond location **Social Impacts:** This potential pond site does not have any apparent social impacts. **Utility Conflicts:** There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail.

Contamination Risk: The contamination risk of this parcel will be discussed in the phase 1 environmental assessment.

3.5. Pond Location 2A



Photo 4: Aerial photograph of pond location 2A located 1000 feet NW of intersection of Ames Haven Road and Neptune Road.

General Information / Parcel Size: 12.9 acres (2.41 ac. acquisition size) This parcel already contains an excavated pond that could be expanded or utilized for the attenuation and treatment of stormwater from the roadway widening. The existing pond is not a permitted water management system and subsequently would not be a joint use pond.

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would discharge into the adjacent ditch that leads to a wetland system to the south east. (Identified in Figure 6).

Topography & Hydrologic Features: This site features an excavated borrow pit that can be expanded and converted to a stormwater management pond. This pond site also features a ditch along the east border that will need to remain in place.

Pond Access: This pond site would need an access easement or the acquisition of a 20 foot parcel have legal and suitable access from Neptune Road to the Pond.

Wetland Impacts: According to the National Wetland Inventory Map there are identified wetlands within this pond site location, however, this does not appear to be accurate. A Natural Resource Evaluation report was prepared for this pond site. This report identified a freshwater marsh with potential impacts.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone X indicating an area outside of the 100 year flood plain.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. The Natural Resource Evaluation

Report indicated that this pond site includes habitat impacts. Please refer to that report for further discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a high probability for historic archeological resources.

Historical Impacts: The CRAS did not identify a historical site within this pond location **Social Impacts:** This potential pond site does not have any apparent social impacts. **Utility Conflicts:** There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail. **Contamination Risk:** The contamination risk of this parcel will be discussed in the phase 1 environmental assessment.

3.6. Pond Location 2B



Photo 5: Aerial photograph of pond location 2B located 1000 feet NW of intersection of Ames Haven Road and Neptune Road.

General Information / Parcel Size: 15 acres (3.50 ac. Acquisition size). Pond Site location 2B is a parcel under private ownership that is mostly undeveloped.

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would discharge into the adjacent ditch that leads to Fish Lake. (Identified in Figure 6).

Topography & Hydrologic Features: There are no notable topographic or hydrologic features or constraints associated with this pond site

Pond Access: This pond would have access directly from Neptune Road.

Wetland Impacts: A Natural Resource Evaluation report was prepared for this pond site and indicated that there are no wetland or surface water impacts associated with site.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone X indicating an area outside of the 100 year flood plain.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. The Natural Resource Evaluation Report indicated that this pond site includes habitat impacts. Please refer to that report for further discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a high probability for historic archeological resources.

Historical Impacts: The CRAS did not identify a historical site within this pond location **Social Impacts:** This potential pond site does not have any apparent social impacts. **Utility Conflicts:** There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail. **Contamination Risk:** The contamination risk of this parcel will be discussed in the phase 1 environmental assessment

3.7. Pond Location 2C



Photo 6: Aerial photograph of pond location 2C located 300 ft NW of the Neptune Overpass of Florida's Turnpike on the Neptune Middle School Campus.

General Information / Parcel Size: 4.17 acres. This parcel contains a dry stormwater pond that could be excavated to be utilized for the attenuation and treatment of stormwater from the roadway widening. This conversion to a wet pond could provide additional storage without utilizing more land than what has already been allocated by Neptune Middle School for stormwater management.

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would discharge into the adjacent wetland area along the Florida's Turnpike. This area would need to be evaluated to see if it has capacity to handle re-directed flow.

Topography & Hydrologic Features: This site is currently a dry pond serving Neptune Middle School.

Pond Access: An access agreement between the School District of Osceola County an Osceola County may have to be established. Alternatively, access directly from Neptune could be proposed as a part of this project.

Wetland Impacts: A Natural Resource Evaluation report was prepared for this pond site and indicated that there are no wetland or surface water impacts associated with site.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone X indicating an area outside of the 100 year flood plain.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. No Habitat impacts were identified for this pond site by the Natural Resource Evaluation Report. Please refer to the Natural Resource Evaluation Report for a discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a moderate probability for historic archeological resources.

Historical Impacts: The CRAS did not identify a historical site within this pond location **Social Impacts:** A pond at this location would expand an existing school site's pond. **Utility Conflicts:** There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail. **Contamination Risk:** The contamination risk of this parcel will be discussed in the phase 1 environmental assessment

3.8. Pond Location 3A



Photo 7: Aerial photograph of pond location 3A adjacent to the St. Cloud Canal (C-31).

General Information / Parcel Size: 0.66 acres. This pond site contains several small parcels with various ownership. A pond site at this location is desired for the purpose of treating and attenuating stormwater runoff from the expanded Neptune Road from the Turnpike to the St. Cloud Canal (C-31).

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would discharge into the adjacent St. Cloud Canal (C-31).

Topography & Hydrologic Features: There are no notable topographic or hydrologic features or constraints associated with this pond site

Pond Access: Pond access would be from the County Park Entrance.

Wetland Impacts: A Natural Resource Evaluation report was prepared for this pond site and indicated that there are no wetland or surface water impacts associated with site.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone X indicating an area outside of the 100 year flood plain.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. No Habitat impacts were identified for this pond site by the Natural Resource Evaluation Report. Please refer to the Natural Resource Evaluation Report for a discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a moderate probability for historic archeological resources.

Historical Impacts: The CRAS did not identify a historical site within this pond location **Social Impacts:** This potential pond site is within private property adjacent to a park.

Utility Conflicts: There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail. **Contamination Risk:** The contamination risk of this parcel will be discussed in the phase 1 environmental assessment.

3.9. Pond Location 3B



Photo 8: Aerial photograph of pond location 3B adjacent to the St. Cloud Canal (C-31).

General Information / Parcel Size: 0.8 acres. This pond site is on a single parcel. A pond site at this location is desired for the purpose of treating and attenuating stormwater runoff from the expanded Neptune Road from the Turnpike to the St. Cloud Canal (C-31).

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would discharge into the adjacent St. Cloud Canal (C-31).

Topography & Hydrologic Features: There are no notable topographic or hydrologic features or constraints associated with this pond site

Pond Access: This pond will need access from the adjacent property owner or directly from Neptune Road with the construction of a new driveway.

Wetland Impacts: A Natural Resource Evaluation report was prepared for this pond site and indicated that there are no wetland or surface water impacts associated with site.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone X indicating an area outside of the 100 year flood plain.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. No Habitat impacts were identified for this pond site by the Natural Resource Evaluation Report. Please refer to the Natural Resource Evaluation Report for a discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a moderate probability for historic archeological resources.

Historical Impacts: The CRAS did not identify a historical site within this pond location **Social Impacts:** This potential pond site does not have any apparent social impacts.

Utility Conflicts: There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail.

Contamination Risk: The contamination risk of this parcel will be discussed in the phase 1 environmental assessment.

3.10. Pond Location 4A



Photo 9: Aerial photograph of pond location 4 located 1500 ft South of Neptune Road on Betsy Ross lane on the Neptune Elementary School Campus.

General Information / Parcel Size: 0.98 acres. This parcel contains a wet detention stormwater pond serving Neptune Elementary School that could be expanded to accommodate the attenuation and treatment of stormwater from the roadway widening.

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would discharge into the adjacent wetland area along the Florida's Turnpike which discharges to the St. Cloud Canal (C-31).

Topography & Hydrologic Features: This pond site is partially occupied by a wet detention pond serving Neptune Elementary School.

Pond Access: Pond access would be directly from Betsy Ross Lane.

Wetland Impacts: A Natural Resource Evaluation report was prepared for this pond site and indicated that there are no wetland or surface water impacts associated with site.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone X indicating an area outside of the 100 year flood plain.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. The Natural Resource Evaluation Report indicated that this pond site includes habitat impacts. Please refer to that report for further discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a moderate probability for historic archeological resources.

Historical Impacts: The CRAS did not identify a historical site within this pond location **Social Impacts:** This potential pond site expands a pond owned by a school.

Utility Conflicts: There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail.

Contamination Risk: The contamination risk of this parcel will be discussed in the phase 1 environmental assessment.

3.11. Pond Location 4B



Photo 10: Aerial photograph of pond location 4 located 1500 ft South of Neptune Road on Betsy Ross lane on the Neptune Elementary School Campus.

General Information / Parcel Size: 1.03 acres. This acquisition is currently an abandoned citrus grove.

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would need to discharge through a piping system within the Betsy Ross Lane and Neptune right-of-way to St. Cloud Canal (C-31).

Topography & Hydrologic Features: This pond site is features rows of citrus which discharge to the north into the low lying woodland/wetland area.

Pond Access: Pond access would be directly from Betsy Ross Lane.

Wetland Impacts: A Natural Resource Evaluation report was prepared for this pond site and indicated that there are no wetland or surface water impacts associated with site.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone X indicating an area outside of the 100 year flood plain.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. The Natural Resource Evaluation Report indicated that this pond site includes habitat impacts. Please refer to that report for further discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a moderate probability for historic archeological resources.

Historical Impacts: The CRAS did not identify a historical site within this pond location **Social Impacts:** This potential pond site does not have any apparent social impacts.

Utility Conflicts: There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail.

Contamination Risk: The contamination risk of this parcel will be discussed in the phase 1 environmental assessment.

3.12. Pond Location 5A



Photo 11: Aerial photograph of pond location 5A located just west of the intersection of Franklin Street and Neptune Road.

In 2017 a portion of the Neptune Road from Old Canoe Creek to US-192 was under design for widening. During this time a permit was issued from SFWMD under permit application No. 17-0621-12 to allow for the use of the adjacent pond, shown in the image above, for stormwater treatment and attenuation. With this permit no additional pond needs are anticipated to support the widening of Neptune in this basin. This information is clearly outlined in SFWMD Permit Application No.17-0621-12. Please see the image below for a copy of the permit letter.



Regulation Application No.: 170621-12

September 7, 2017

OSCEOLA COUNTY BOARD OF COUNTY COMMISSIONERS PUBLIC WORKS 1 COURTHOUSE SQUARE SUITE 3100 KISSIMMEE, FL 34741

Dear Permittee

SUBJECT: Permit No.: 49-01233-P Project: NEPTUNE ROAD Location: Osceola County,

\$4/T26\$/R30E

District staff has reviewed the information submitted August 28, 2017, for modification of permit 49-01233-P for construction of 1.25 acres of new impervious area to widen Neptune Road from 2 lanes to 4 lanes between Old Canoe Creek Road to E. Irlo Bronson Highway (U.S. Highway 192). The project also includes milling and resurfacing, secondary drainage system improvements and replacement of an existing 8 foot X 12 foot concrete box culvert in Peg Horn Slough. Stomwater will be directed to existing Pond 100 permitted under ERP 49-01233-P, application 020820-7, which has sufficient capacity to provide water quality treatment, attenuation and flood plain compensation for the project.

Based on that information, District staff has determined that the proposed activities are in compliance with the original environmental resource permit and appropriate provisions of paragraph 40E-4.331(2)(b) or 62-330.315(2)(g), Florida Administrative Code. Therefore, these changes have been recorded in our files.

Your permit remains subject to the General Conditions and all other Special Conditions not modified and as originally issued.

Should you have any questions or comments regarding this authorization, please contact this office.

Mark S. Daron, P.E.
Engineer Supervisor
Orlando Service Center

MD/dl

Sincerely,

 Board Of County Commissioners Jacobs Engineering Osceola County Engineer

3.13. Pond Location 5B



Photo 12: Aerial photograph of pond location 5B located just west of the intersection of Franklin Street and Neptune Road.

General Information / Parcel Size: 0.90 acres. Pond Site location 5B is on a single parcel under private ownership that has some infrastructure but is largely undeveloped.

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would discharge into the adjacent Peg Horn Slough. (Identified in Figure 6).

Topography & Hydrologic Features: There are no notable topographic or hydrologic features or constraints associated with this pond site

Pond Access: This pond would have access directly from Neptune Road.

Wetland Impacts: A Natural Resource Evaluation report was prepared for this pond site and indicated that there are no wetland or surface water impacts associated with site.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone AE indicating an area within the 100 year flood plain. It Is important to note that LIDAR elevation data shows only 9% of the pond area identified to be at or below the flood elevation identified on the FEMA flood map which is much different than the mapping zone extents suggest. This 9% is of shallow flooding depth making the volume of storage low. Given that LIDAR identifies a normal water surface in Peg Horn Slough of 57 NAVD and a Flood elevation of 65 NAVD, a pond in this location would not need to propose fill for the pond banks, as sufficient pond storage could be provided through excavation alone which would allow for no adverse floodplain impacts. With an acquisition size of 1.40 acres there is more than enough additional land that could be excavated should extra floodplain compensation be desired. Analysis of further detail can be provided during the design phase of the project.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. Please refer to the Endangered

Species Biological Assessment Report for a discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a high probability for historic archeological resources. **Historical Impacts:** The CRAS did not identify a historical site within this pond location

Social Impacts: This potential pond site does not have any apparent social impacts.

Utility Conflicts: There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail.

Contamination Risk: The contamination risk of this parcel will be discussed in the phase 1 environmental assessment.

3.14. Pond Location 5C

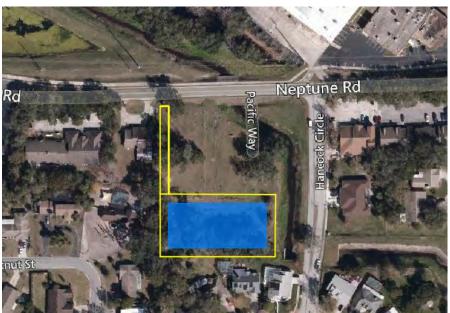


Photo 13: Aerial photograph of pond location 5B located just west of the intersection of Franklin Street and Neptune Road.

General Information / Parcel Size: 1.27 acres. Pond Site location 5B is a parcel under private ownership that has some infrastructure but is undeveloped.

Pond Outfall: After collecting the stormwater discharge from the secondary system and providing stormwater treatment, a pond at this location would discharge into the adjacent Peg Horn Slough. (Identified in Figure 6).

Topography & Hydrologic Features: There are no notable topographic or hydrologic features or constraints associated with this pond site

Pond Access: This pond would need a 20' access easement from the adjacent parcels to the north between the subject parcel and Neptune Road.

Wetland Impacts: A Natural Resource Evaluation report was prepared for this pond site and indicated that there are no wetland or surface water impacts associated with site.

Floodplain Impacts: According to the FEMA FIRM maps this site is located in Zone AE indicating an area within the 100 year flood plain. It Is important to note that LIDAR elevation data shows only 18% of the pond area identified to be at or below the flood elevation identified on the FEMA flood map which is much different than the mapping zone extents suggest. This 18% is of shallow flooding depth making the volume of storage low. Given that LIDAR identifies a normal water surface in Peg Horn Slough of 57 NAVD and a Flood elevation of 65 NAVD, a pond in this location would not need to propose fill for the

pond banks, as sufficient pond storage could be provided through excavation alone which would allow for no adverse floodplain impacts. With an acquisition size of 1.27 acres there is more than enough additional land that could be excavated, adjacent to the floodway should extra floodplain compensation be desired. Analysis of further detail can be provided during the design phase of the project.

Habitat Impacts: According to the U.S. Fish and Wildlife Service GIS map this site is not an identified wildlife refuge or a critical wildlife area. Please refer to the Endangered Species Biological Assessment Report for a discussion of Fauna and Flora found in the area.

Archeological Impacts: The Cultural Resource Assessment Survey (CRAS) conducted for this site indicated a high probability for historic archeological resources. **Historical Impacts:** The CRAS did not identify a historical site within this pond location

Social Impacts: This potential pond site does not have any apparent social impacts.

Utility Conflicts: There are no known utility conflicts that would be associated with this pond. A Utility Assessment report is being conducted which will provide further detail.

Contamination Risk: The contamination risk of this parcel will be discussed in the phase 1 environmental assessment.

3.15. Regional Pond Considerations

Regional stormwater solutions were explored along the length of the roadway corridor. Although there does not appear to be large scale opportunity for regional ponds, there are multiple opportunities for joint use ponds. These are discussed in pond location descriptions and include joint pond opportunities with the Shady Lane extension Pond, Neptune Middle School Pond, and the Neptune Elementary School Pond. Other ponds , including nearby residential ponds, were considered but avoided if expansion was not available. Directing additional stormwater to existing stormwater ponds without expanding them often results is a decrease in residence time in wet detention ponds inadvertently increasing discharges of nutrients and potentially violating state water quality rules. This often also requires careful evaluation of pond stages and evaluation of secondary systems that may be dependent on certain pond stage to maintain proper hydraulic grade lines.

3.16. Floodplain Compensation

Floodplain impacts to this project are minimal. The roadway widening will encroach into areas that have been designated as floodplain. These areas, although minimal, will likely have to be offset within the pond site locations selected. The volume of impacts will be quantified during design when the amount of fill relative to the identified flood elevation. For this reason you will not see the floodplain compensation in the calculation and appendices but rather a healthy 20% contingency.

4. Required Permitting and Pond Design Criteria

Construction of a stormwater management pond within the project area will be subject to the review process of Osceola County and the South Florida Water Management District (SFWMD). A majority of Neptune Road along the route of interest does not have a formal stormwater management system nor a stormwater permit from Osceola County or SFWMD. The portion of Neptune road between Old Canoe Creek Road and US-192 has a permit with SFWMD under permit # 49-01233-P. Below is a summary of the design criteria for each permitting authority.

Correspondence with the Water Management District has not yet occurred, but a preapplication meeting is recommended prior to acquisition of pond parcels.

Stormwater runoff from the proposed road will have to be captured and conveyed to a stormwater pond for water quality treatment and peak flow attenuation.

In accordance with the SFWMD Applicants Handbook water quality will have to be provided for the greater of 1-inch multiplied by the drainage basin area or 2.5-inches multiplied by the impervious area. An additional 50% of water quality volume will be required by SFWMD because this project ultimately discharges to Lake Okeechobee which is an impaired water body. This will establish a treatment volume that will help determine the appropriate pond size. A water quality recovery device, set at the average wet season water table, will hold and slowly release the treatment volume.

Another major design constraint when designing a stormwater pond is peak flow attenuation. In Osceola County and within the Osceola County jurisdiction of the South Florida Water Management District peak flow must be attenuated for the 10 year 72 hour design storm event per the SFWMD Applicants Handbook and the Osceola County Land Development Code; this requirement applies to open drainage basins with positive outfall. The peak stormwater discharge rate from the basin must not increase due to the improvements of this project. A pond control structure will regulate the peak discharge rate from the proposed roadway improvements.

A dry pond would require 1 foot of clearance from the bottom of the pond and the seasonal high water table. Due to the higher groundwater table elevations and longer/deeper pipe runs a wet detention/retention pond will be used as opposed to a dry pond. The wet ponds will be designed with a 10' wide maintenance berm that will give Osceola County access to maintain the pond. Per SFWMD criteria the wet ponds must have a pond area of at least 0.5 acres at the control water level of the pond. This pond size is required to facilitate the treatment of the stormwater.

Please refer to the Computations and Appendices section of this report for calculations determining the required pond sizing.

5. Existing & Proposed Drainage Conditions

5.1 Existing Drainage Conditions

Stormwater runoff from Neptune Road is generally intercepted to roadside swales and conveyed to the nearest outfall location. Neptune Road has four (4) outfall locations within the limits of this project. These locations are identified in Figure 6 and will be referred to in this project as the Partin Canal, Fish Lake Ditch, St. Cloud Canal (C-31), and Peg Horn Slough. Each of these four outfalls convey stormwater to an eventual destination of Lake Tohopekaliga.

5.2 Proposed Drainage Conditions

The proposed roadway will have a curb and gutter stormwater collection system. Stormwater captured by the proposed inlets will be conveyed, by closed storm sewer pipes, to one or multiple of the potential pond sites. Captured stormwater will receive treatment and attenuation by the wet detention pond before discharging to the adjacent stormwater outfall (see Figure 6 for outfall locations).

5.3 Tailwater

It is fortunate for this project that the outfall location for each potential pond site are close to previously studied bodies of water. Flood stages for Fish Lake and the Partin Canal have been studied as a part of the Stormwater Management Plan for Bass Slough performed for Osceola County. Peg Horn Slough and the St. Cloud Canal (C-31 have been incorporated into past FEMA modeling efforts. These previous modeling efforts can be obtained and utilized during the design process to establish tailwater influences on the proposed pond(s). Below is a Table summarizing the tailwater influences

Tailwater ID	Storm Event	Peak Stage (ft NAVD88)	Data Source
	10yr 24hr	57.08	Occasio County Dysinasa
Partin Canal	10yr 72hr	57.72	Osceola County Drainage Study of Bass Slough
	100yr 72hr	59.31	Study of bass slough
	10yr 24hr	57.2	Occasio Carretti Discinaca
Fish Lake	10yr 72hr	57.8	Osceola County Drainage Study of Bass Slough
	100yr 72hr	59.3	Study of bass slough
	10yr 24hr	NCA	NCA
C-31 Canal	10yr 72hr	NCA	NCA
	100yr 72hr	57	FEMA FIS Report
Doobous	10yr 24hr	NCA	NCA
Peghorn Slough	10yr 72hr	NCA	NCA
Siougii	100yr 72hr	63	FEMA FIS Report

NCA = Not Currently Available

For excepts from these data sources please refer to section 7.

6. Summary of Findings & Conclusion

Pond site rankings were determined by considering the pond location, quantity of parcels that would need to be acquired, wetland impacts, floodplain impacts, habitat impacts, archeological impacts, historical site impacts, social impacts, utility conflicts, and contamination risk. 12 pond sites were identified and five were given a priority ranking of 1.

- Pond 1A was identified as the preferred site because the environmental impacts were minimal and it has a lower cost
- Pond 2C was identified as the preferred site because the environmental impacts are similar or lower than other sites and it has a lower cost
- Pond 3B was identified as the preferred site because pond 3A has potential 4(f) impacts associated with Partin Triangle Park

- Pond 4A was identified as the preferred pond site because the environmental impacts are similar or lower than the other site and it has a lower cost.
- Pond 5A was identified as the preferred site because it has already been permitted to accept the roadway widening.

For details and supporting documents that assisted in these pond preferences/rankings please refer to Section 7. These documents contain information on the environmental impacts, soils, contamination risk, archeological impacts and impacts to historical resources.

.



NEPTUNE ROAD POND SITING REPORT COMPUTATIONS AND APPENDICES

Background Information: Neptune Road, based on the location of the low points, cross drains, turnpike crossing, and crossing of the C-31 canal will need to prepare for a minimum of 5 smaller ponds. The following preliminary pond sizing calculations are broken into the 5 basins accordingly.

Limitations and Assumptions: The pond sizing in this report is preliminary in nature. This preliminary sizing was done without the benefit of topographic survey or defined water quality volume requirements from the South Florida Water Management District and should be utilized accordingly. These are items that are necessary for proper pond sizing. Topographic information was determined from LIDAR data and/or observations from adjacent developments. This pond sizing assumes that offsite flows will not be attenuated but rather passed through the pond system at the same rate they are received.

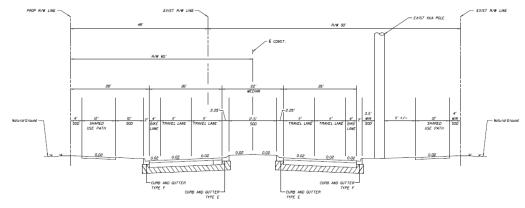
SFWMD Water Quality Discussion: The South Florida Water Management District (SFWMD) is the regulatory authority governing the volume of water quality we must provide in our roadway pond systems. Their water quality volume calculation traditionally requires that a project provide the greater of 1-inch of runoff over the entire project acreage or 2.5" over the impervious area. For roadway widening projects the SFWMD frequently allows for the project to just provide 2.5" of water quality volume for just the additional impervious area added by the project. This is distinction is of great importance to note when selecting pond sites because the latter interpretation can make the pond roughly 10 to 70% smaller depending on the groundwater and cover conditions. Since a binding interpretation form the water management district cannot be received until a permit is submitted the preliminary pond sizing calculations were based on the providing the larger water quality volume.

1. Roadway Basin Area

The proposed right-of-way width will be 139 feet. This will encompass an area of approximately 66 acres of right-of-way. Please see the table below for the acreage of each drainage basin.

Basin ID	Basin 1	Basin 2	Basin 3	Basin 4	Basin 5	Total
Basin Size (ac.)	19.60	22.14	4.72	7.53	11.91	65.90

2. Percentage of Impervious Area



BETWEEN HENRY PARTIN RD. AND KINGS CREST RD. KUA POLES REMAIN

ALTERNATIVE I

Based on the proposed right of way options above, the proposed roadway will contain 60.8% impervious area. To account for additional impervious area associated with turn lanes and transitions an additional 5% impervious area over the entire basin area was added to pond siting pond size calculations.

3. Determination of Required Treatment Volume

The required treatment volume for the 139' right-of-way is calculated as the greater of

- 1-inch Over Drainage Basin Area OR
- 2.5-inch over percent impervious area of the project

Then multiplied by 1.5 to provide the additional 50% water quality volume to meet the Lake Okeechobee Impaired Basin Criteria

A summary of the required water quality volume is provided for each basin in the calculation table below

Basin ID	Basin 1	Basin 2	Basin 3	Basin 4	Basin 5
Basin Size (ac.)	19.60	22.14	4.72	7.53	11.91
% of Impervious	65.8%	65.8%	65.8%	65.8%	65.8%
1-inch Treatment (ac-ft)	1.63	1.85	0.39	0.63	0.99
2.5-inches Treatment (ac-ft)	2.69	3.04	0.65	1.03	1.63
Greater of the two (ac-ft)	2.69	3.04	0.65	1.03	1.63
+ 50% Impaired Basin (ac-ft)	1.34	1.52	0.32	0.52	0.82
Total Treatment Volume Estimate (ac-ft)	4.03	4.55	0.97	1.55	2.45

4. Pond Sizing Calculation

As can be seen on the Soils Map Figure 3 the pond sites contain mostly Myakka Fine Sand and Smyrna Fine Sand. The seasonal high water table is estimated, by the USGS Soil Survey of Osceola County, to be between 6 and 18-inches below grade. A Preliminary Geotechnical Investigation was performed for pond site locations options 1A, 1B, 2A-C, 4A, and 5 which gave more accurate seasonal high water table estimates for those locations. The pond size needed for treatment and attenuation will be heavily dependent on the seasonal high water table encountered on the pond site and identified in the Preliminary Geotechnical Investigation. Although the USGS soil survey provides an estimate for the other pond sites not in the report, actual soil borings will provide more accurate data during the design process to better understand the pond sizing for those excluded pond sites. In addition to the Geotechnical Investigation and USGS soil information LIDAR data was used to determine water elevation of nearby water bodies to make estimates of groundwater levels of pond sites immediately adjacent.

	Pond										
Pond Site ID	1A	1B	2A	2B	2C	3A	3B	4A	4B	5B	5C
Estimated Depth To											
AWSWT* (ft)	3	1.4	2.1	3.1	2.1	5	5	3.5	3	5.3	5.3
Free Board											
Requirement (ft)	1	1	1	1	1	1	1	1	1	1	1
Bank Elevation											
Relative to Existing											
Grade (ft)	1.5	1.25	1.25	1	1	0	0	0.25	0.75	0.25	0.25
Storage Height for											
Attenuation and											
Treatment (ft)	3.5	1.65	2.35	3.1	2.1	4	4	2.75	2.75	4.55	4.55

*Average Wet Season Water Table. Note: Pond 5A is not included since it is already permitted and approved by the water management district.

Using the design storm event (10 year 72 hour) rainfall of 7.75 inches and the NRCS methodology found in the FDOT Drainage Handbook Stormwater Management Facilities the required storage volume is as follows:

$$V_S = V_{R_{Proposed}} - V_{R_{Existing}}$$

$$V_r = Q_R A$$

$$Q_R = \frac{\left(P - 0.2\left(\frac{1000}{CN} - 10\right)\right)^2}{P + 0.8\left(\frac{1000}{CN} - 10\right)}$$

$$V_S = Attenuation Volume Estimate (ac - ft)$$

$$V_r = Volume of Runoff (ac - ft)$$

$$Q_R = Depth of Direct Runoff (inches)$$

$$A = Area of Watershed (acres)$$

$$P = Actual Rainfall (inches)$$

$$CN = Curve Number$$

The sum of the required attenuation storage volume plus the estimated treatment volume yields the total required pond storage volume. Below is a table of these calculations for a pond in each one of the 5 basins.

Pond Site ID	Pond	Pond	Pond	Pond	Pond	Pond	Pond	Pond	Pond	Pond	Pond
Polid Site ID	1A	1B	2A	2B	2C	3A	3B	4A	4B	5B	5C
A (ac)	19.60	19.60	22.14	22.14	22.14	4.72	4.72	7.53	7.53	11.91	11.91
CN Existing	84	84	85	84.50	84.50	86	85.94	86	85.94	86	85.94
CN Proposed	92	92	92	91.84	91.84	92	91.84	92	91.84	92	91.84
P (in)	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75
Qr Existing (in)	5.63	5.63	5.67	5.67	5.67	5.84	5.84	5.84	5.84	5.84	5.84
Qr Proposed (in)	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53
Vr Existing (ac-ft)	9.20	9.20	10.47	10.47	10.47	2.30	2.30	3.66	3.66	5.80	5.80
Vr Proposed (ac- ft)	10.67	10.67	12.05	12.05	12.05	2.57	2.57	4.10	4.10	6.48	6.48
Vs (ac-ft)	1.47	1.47	1.58	1.58	1.58	0.27	0.27	0.43	0.43	0.68	0.68
Treatment											
Volume Needed	4.03	4.03	4.55	4.55	4.55	0.97	0.97	1.55	1.55	2.45	2.45
(ac-ft)											
Total Volume Needed (ac-ft)	5.50	5.50	6.13	6.13	6.13	1.24	1.24	1.98	1.98	3.13	3.13

Pond Site ID	Pond										
1 0114 0110 12	1A	1B	2A	2B	2C	3A	3B	4A	4B	5B	5C
Total Live Volume (ac- ft)	5.50	5.50	6.13	6.13	6.13	1.24	1.24	1.98	1.98	3.13	3.13
Estimated Available											
Live Storage Height	3.5	1.65	2.35	3.1	2.1	4	4	2.75	2.75	4.55	4.55
(ft)											
Portion of Pond Size	1.57	3.33	2.61	1.98	2.92	0.31	0.31	0.72	0.72	0.60	0.69
for Stormwater (ac.)	1.57	3.33	2.61	1.98	2.92	0.31	0.31	0.72	0.72	0.69	0.69
Area for Tie Backs											
(with 10%	0.40	0.71	0.56	0.39	0.55	0.05	0.05	0.10	0.15	0.10	0.10
contingency) (ac.)											
Total Pond Size (ac.)	1.97	4.04	3.17	2.37	3.48	0.36	0.36	0.82	0.87	0.79	0.79
Resulting Pond Size with 20% Contingency	2.36	4.84	3.81	2.84	4.17	0.43	0.43	0.99	1.04	0.95	0.95

Taking the total treatment and attenuation volume need divided by the storage height at of each pond we can derive the total pond acreage. Please see the table below for the estimated pond sizes for each Pond/Basin. A 20% contingency is added taking consideration the unknowns and to provide a pond maintenance berm. As discussed in the assumptions and limitations section of this report, this is preliminary in nature and the final pond sizing will be highly dependent on the average wet season water table provided

by geotechnical borings that will be performed at each pond location as well as highly dependent on the water quality requirements set forth by the SFWMD for this project.

Pond Site ID	Pond										
Folia Site ib	1A	1B	2A	2B	2C	3A	3B	4A	4B	5B	5C
Total Live Volume (ac-ft)	5.50	5.50	6.13	6.13	6.13	1.24	1.24	1.98	1.98	3.13	3.13
Estimated Available Live Storage Height (ft)	3.5	1.65	2.35	3.1	2.1	4	4	2.75	2.75	4.55	4.55
Portion of Pond Size for Stormwater (ac.)	1.57	3.33	2.61	1.98	2.92	0.31	0.31	0.72	0.72	0.69	0.69
Area for Tie Backs (with 10% contingency) (ac.)	0.40	0.71	0.56	0.39	0.55	0.05	0.05	0.10	0.15	0.10	0.10
Total Pond Size (ac.)	1.97	4.04	3.17	2.37	3.48	0.36	0.36	0.82	0.87	0.79	0.79
Resulting Pond Size with 20% Contingency	2.36	4.84	3.81	2.84	4.17	0.43	0.43	0.99	1.04	0.95	0.95

For an understanding on how the SFWMD interpretation of water quality impacts pond sizing please see the alternate pond sizes below for the scenario where the SFWMD only requires the project to treat 2.5" over the additional impervious area.

Pond Site ID	Pond 1A	Pond 1B	Pond 2A	Pond 2B	Pond 2C	Pond 3A	Pond 3B	Pond 4A	Pond 4B	Pond 5B	Pond 5C
Total Live Volume (ac-ft)	4.09	4.09	4.40	4.40	4.40	0.76	0.76	1.20	1.20	1.91	1.91
Estimated Available Live Storage Height (ft)	3.5	1.65	2.35	3.1	2.1	4	4	2.75	2.75	4.55	4.55
Portion of Pond Size for Stormwater (ac.)	1.17	2.48	1.87	1.42	2.10	0.19	0.19	0.44	0.44	0.42	0.42
Area for Tie Backs (with 10% contingency) (ac.)	0.31	0.54	0.42	0.29	0.41	0.04	0.04	0.07	0.10	0.07	0.07
Total Pond Size (ac.)	1.48	3.01	2.29	1.71	2.51	0.23	0.23	0.51	0.54	0.49	0.49
Resulting Pond Size with 20% Contingency	1.77	3.62	2.75	2.05	3.01	0.27	0.27	0.61	0.65	0.59	0.59



Table 1: Pond Siting Matrix

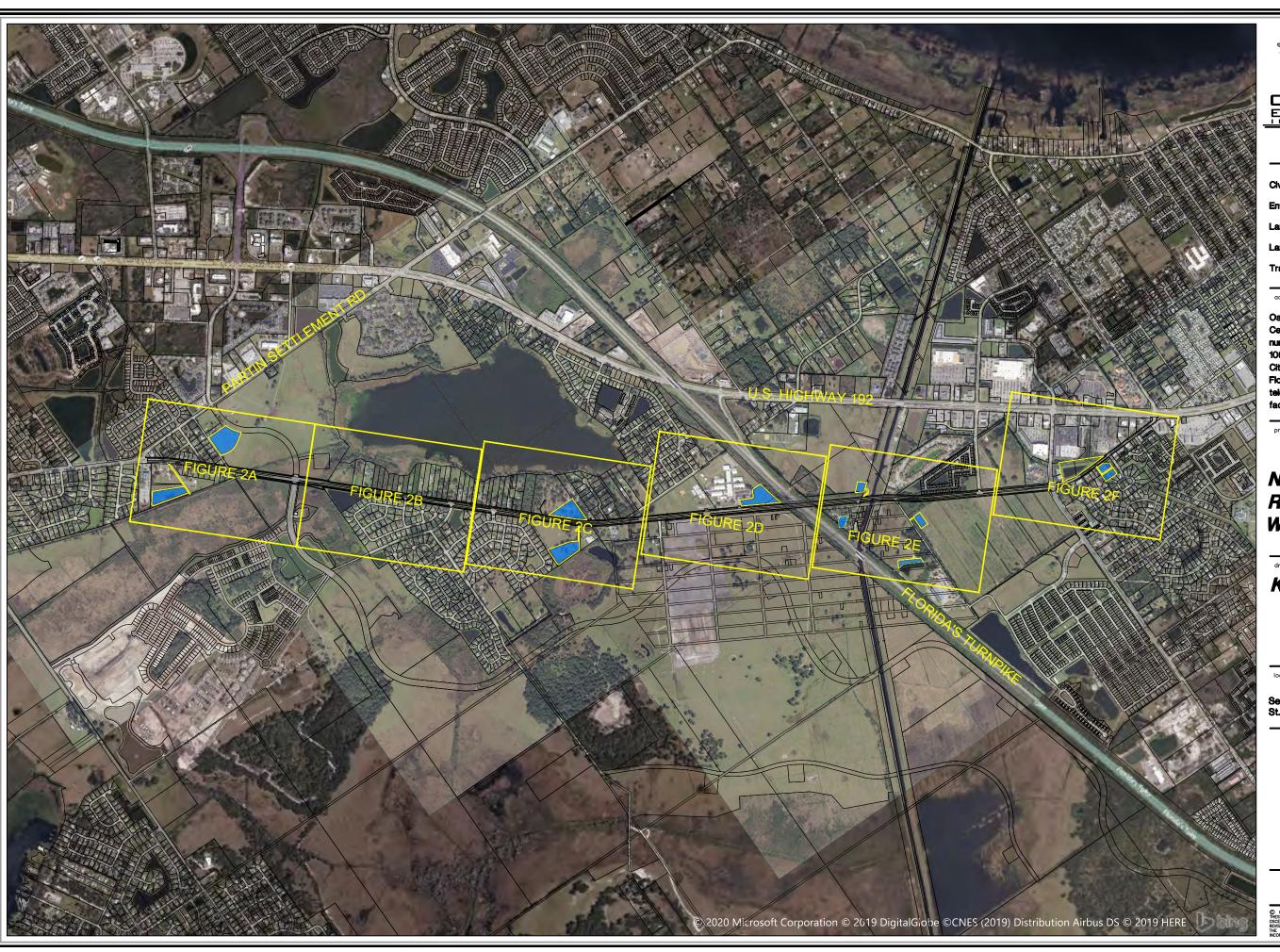
Pond Name	Pond Location	Pond Size (ac.)	Quantity of Parcels to be Acquired	Wetland Impacts	Floodplain Impacts	Habitat impacts	Archeological Impacts	Historical Site Impacts	Social Impact	Utility Conflicts	Contamination Risk	Current Land Use	Future Land Use	Preliminary Pond Cost Estimate	Preliminary Ranking
1A	NOFF Pond	2.36	2	Yes ¹	No	Yes ²	High ³	No	No ⁴	No	Medium ⁵	RS-2	Low Density Residential	Lower	1
1B	Stroupe Road	4.84	1	No ¹	No	No ²	High ³	No	No ⁴	No	Low ⁵	PD	Low Density Residential	Higher	2
2A	Tregre	3.81	1	Yes ¹	No	Yes ²	High ³	No	No ⁴	No	Medium ⁵	MXD	Mixed Use	Higher	2
2B	Horning	2.84	1	No ¹	No	Yes ²	High ³	No	No ⁴	No	Low ⁵	RS-1	Low Density Residential	Higher	3
2C	Neptune Middle School	4.17	1	No ¹	No	No ²	Moderate ³	No	Yes ⁴	No	Low ⁵	IN	Institutional	Lower	1
3A	Triangle Park	0.43	3	No ¹	No	No ²	Moderate ³	No	Yes ⁴	No	Medium ⁵	AC	Institutional	Lower	2
3B	Partin	0.43	1	No ¹	No	No ²	Moderate ³	No	No ⁴	No	Low ⁵	AC	Low Density Residential	Higher	1
4A	Neptune Elementary	0.99	1	No ¹	No	Yes ²	Moderate ³	No	Yes ⁴	No	Low ⁵	IN	Institutional	Lower	1
4B	Betsy Ross Lane	1.04	1	No ¹	No	Yes ²	Moderate ³	No	No ⁴	No	Medium ⁵	НВ	Commericial	Higher	2
5A	County Peghorn Pond	Irrelevant*	0	No	No	No	No	No	No	No	n/a	Irrelevant*	Irrelevant*	None	1
5B	BNOB	0.95	2	No ¹	Yes	No ²	High ³	No	No ⁴	No	Low ⁵	R-3	Medium Density Residential	Lower	3
5C	BNOB	0.95	1	No ¹	Yes	No ²	High ³	No	No ⁴	No	Low ⁵	R-3	Medium Density Residential	Lower	2

Notes:

- 1 Potential wetland/surface water impacts based on the Wetland Evaluation Report, Provided by Kimley-Horn and Associates, Inc. (Kimley-Horn)
- 2 Effects on protected species based on Protected Species Habitat Assessment prepared by Kimley-Horn
- 3 This represents markers of probability of effects on historical or archaeological resources based upon the Cultural Resource Assessment Survey provided by SEARCH Inc.
- 4 Social impacts include relocations; however, these relocations will occur due to the widening. The remainder of the parcels will be used for ponds. Social Impacts also include effects to community focal points and/or Section 4(f) properties.
- 5 Contamination Risk based on the Level 1 Contamination Screening Evaluation Report provided by Geotechnical and Environmental Consultants, Inc.

 Irrelevant* = this category is irrelavant because this pond site is already permitted to accept and treat the stormwater from the roadway widening project







Civil Engineers

Environmental Engineers

Landscape Architects

Land Planners &

Transportation Engineers

ddress:

Osceola Engineering Incorporated Certificate of Authorization number# 00026265 1003 Florida Avenue City of Saint Cloud Florida 34769

telephone: (407) 891-0452 facsimile: (407) 891-9173

project:

Neptune Road Widening

drawina

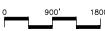
Key Sheet

location

Sec 01, Twp 26 S., Rng 30 E. St. Cloud, Florida



North



Scale: 1" = 1800'

Date: October 15, 2018

KEY SHEET

© COPYRIGHT 2015 BY OSCEOLA ENGINEERING, INCORPORATED THESE DOCUMENTS AND THEIR CONTENTS ARE THE PROPERTY OF OSCEOLA ENGINEERING, INCORPORATED. ANY REPRODUCTIONS, REVISIONS, MODIFICATIONS OR USE OF THESE DOCUMENTS WITHOUT THE EXPRESSED WRITTEN CONSENT OF OSCEOLA ENGINEERING,





Civil Engineers

Environmental Engineers

Landscape Architects

Land Planners &

Transportation Engineers

address

Osceola Engineering Incorporated Certificate of Authorization number# 00026265 1003 Florida Avenue City of Saint Cloud Florida 34769 telephone: (407) 891-0452

facsimile: (407) 891-9173

project

Neptune Road Widening

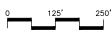
rawina.

Neptune Road Pond Siting Report

locatio

Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida



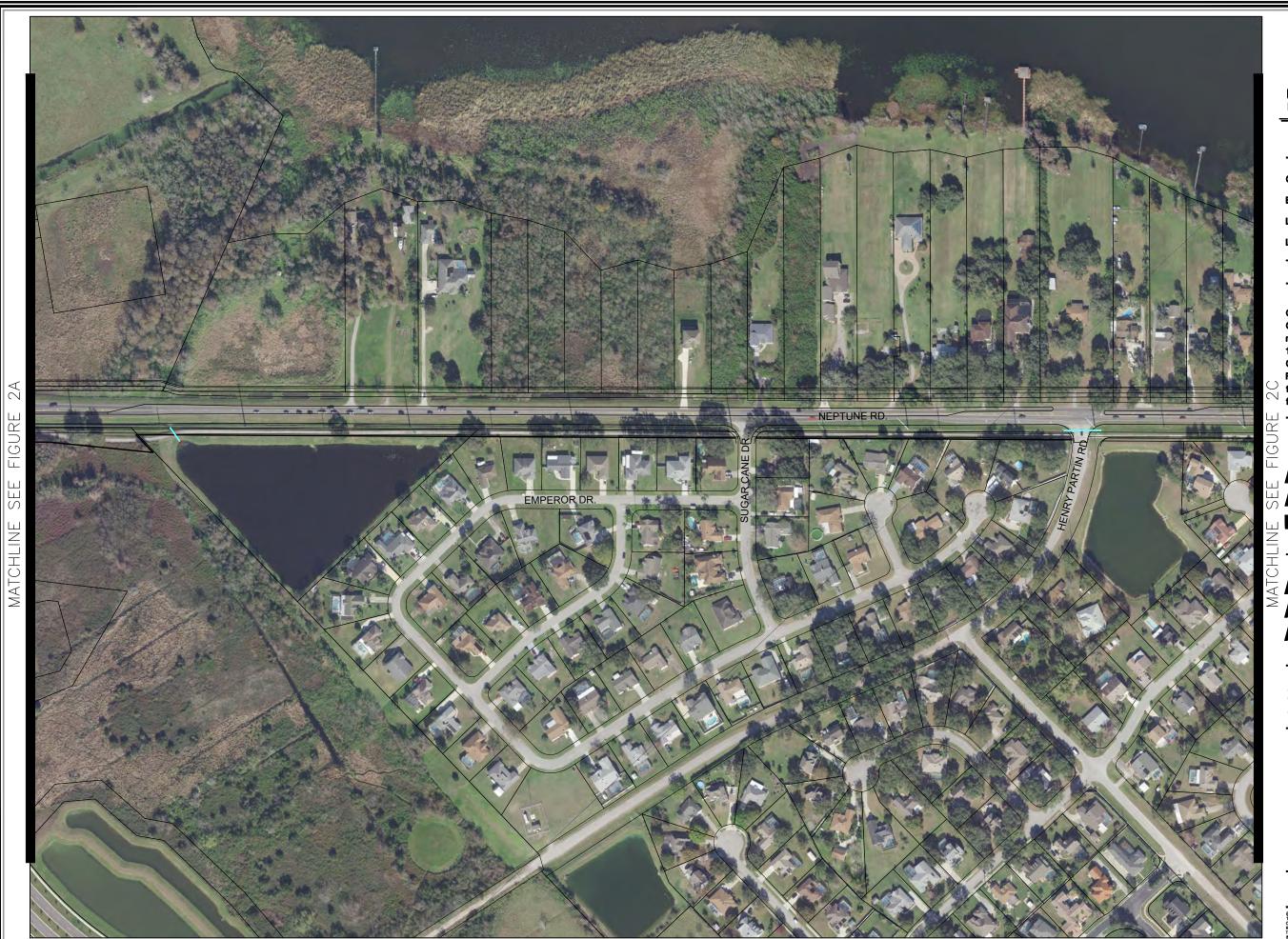


Scale: 1" = 250'

Date: February 15, 2019

FIGURE 2A

© COPYRIGHT 2015 BY OSCEOLA ENGINEERING, INCORPORATINES DOCUMENTS AND THEIR CONTENTS ARE THE PROPERTY OSCEOLA ENGINEERING, INCORPORATED. ANY REPRODUCTION REVISIONS, MODIFICATIONS OR USE OF THESE DOCUMENTS WITHOUTHE EXPRESSED WRITTEN CONSENT OF OSCEOLA ENGINEERII INCORPORATED IS PROHIBITED BY LAW.





Environmental Engineers

Landscape Architects

Land Planners &

Transportation Engineers

ddress:

Osceola Engineering Incorporated Certificate of Authorization number# 00026265 1003 Florida Avenue City of Saint Cloud Florida 34769

telephone: (407) 891-0452 facsimile: (407) 891-9173

project

□ Neptune
□ Road
□ Widening

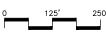
drawina

Neptune Road Pond Siting Report

location

Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida





Scale: 1" = 250'

Date: February 15, 2019

FIGURE 2B

© COPPRIONT 2015 BY OSCEOLA ENGINEERING, INCORPORATE HESS DOCUMENTS AND THEIR CONTENTS ARE THE PROPERTY OSSEGUA ENGINEERING, INCORPORATED. ANY REPRODUCTIONS VERSIONS, MODIFICATIONS OR USE OF THESE DOCUMENTS WITH HE EXPRESSED WITHEN CONSENT OF OSCEOLA ENGINEERING COOPPORATED IS PROHIBITED BY LAW.





Environmental Engineers

Landscape Architects

Land Planners &

Transportation Engineers

address

Osceola Engineering Incorporated Certificate of Authorization number# 00026265 1003 Florida Avenue City of Saint Cloud Florida 34769 telephone: (407) 891-0452

facsimile: (407) 891-9173

project

Neptune Road Widening

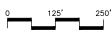
trawina:

Neptune Road Pond Siting Report

locat

Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida





Scale: 1" = 250'

Date: February 15, 2019

FIGURE 2C

© COPPRICHT 2015 BY OSCEOLA ENGINEERING, INCORPORATE THESE DOCUMENTS AND THEIR CONTENTS ARE THE PROPERTY OSCEOLA ENGINEERING, INCORPORATED. ANY REPRODUCTIONS PREVISIONS, MODIFICATIONS OR USE OF THESE DOCUMENTS WITH THE EXPRESSED WITHEN CONSENT OF OSCEOLA ENGINEERING NOORPORATED IN PROHIBITED BY LAW.





Environmental Engineers

Landscape Architects

Land Planners &

Transportation Engineers

address:

Osceola Engineering Incorporated Certificate of Authorization number# 00026265 1003 Florida Avenue City of Saint Cloud Florida 34769 telephone: (407) 891-0452

facsimile: (407) 891-9173

project:

Neptune Road Widening

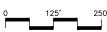
drawing

Neptune Road Pond Siting Report

location

Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida





Scale: 1" = 250'

Date: February 15, 2019

FIGURE 2D

© COPYRIGHT 2015 BY OSCEOLA ENGINEERING, INCORPORATE THESE DOCUMENTS AND THEIR CONTENTS ARE THE PROPERTY O SOCEOLA ENGINEERING, INCORPORATED. ANY REPRODUCTIONS ENVISIONS, MODIFICATIONS OR USE OF THESE DOCUMENTS WITHOUT THE EXPRESSED WRITTEN CONSENT OF OSCEOLA ENGINEERING NORPORATED IS PROHIBITED BY LAW.





Environmental Engineers

Landscape Architects

Land Planners &

Transportation Engineers

ddress:

Osceola Engineering Incorporated
Certificate of Authorization
number# 00026265
1003 Florida Avenue
City of Saint Cloud
Florida 34769
telephone: (407) 891-0452
facsimile: (407) 891-9173

project

Neptune Road Widening

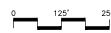
rawina:

Neptune Road Pond Siting Report

location

Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida



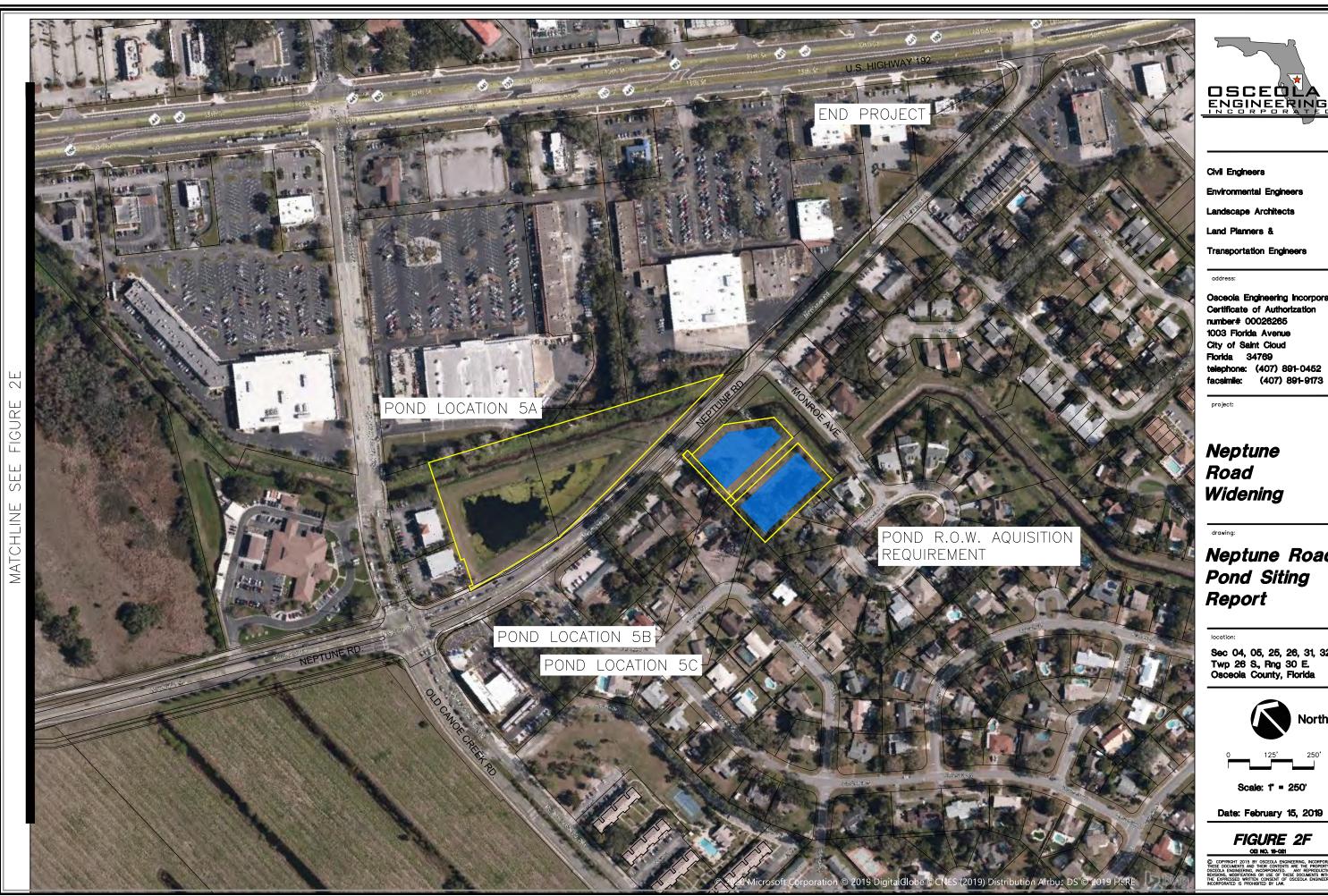


Scale: 1" = 250'

Date: February 15, 2019

FIGURE 2E

© COPYRIGHT 2015 BY OSCEOLA ENGINEERING, INCORPORATE THESE DOCUMENTS AND THEIR CONTENTS ARE THE PROPERTY O SOCEOLA ENGINEERING, INCORPORATED. ANY REPRODUCTIONS ENVISIONS, MODIFICATIONS OR USE OF THESE DOCUMENTS WITHOUT THE EXPRESSED WRITTEN CONSENT OF OSCEOLA ENGINEERING NORPORATED IS PROHIBITED BY LAW.





Environmental Engineers

Landscape Architects

Land Planners &

Transportation Engineers

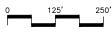
Osceola Engineering Incorporated Certificate of Authorization number# 00026265 1003 Florida Avenue City of Saint Cloud Florida 34769 telephone: (407) 891-0452

Neptune Road Widening

Neptune Road Pond Siting Report

Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida

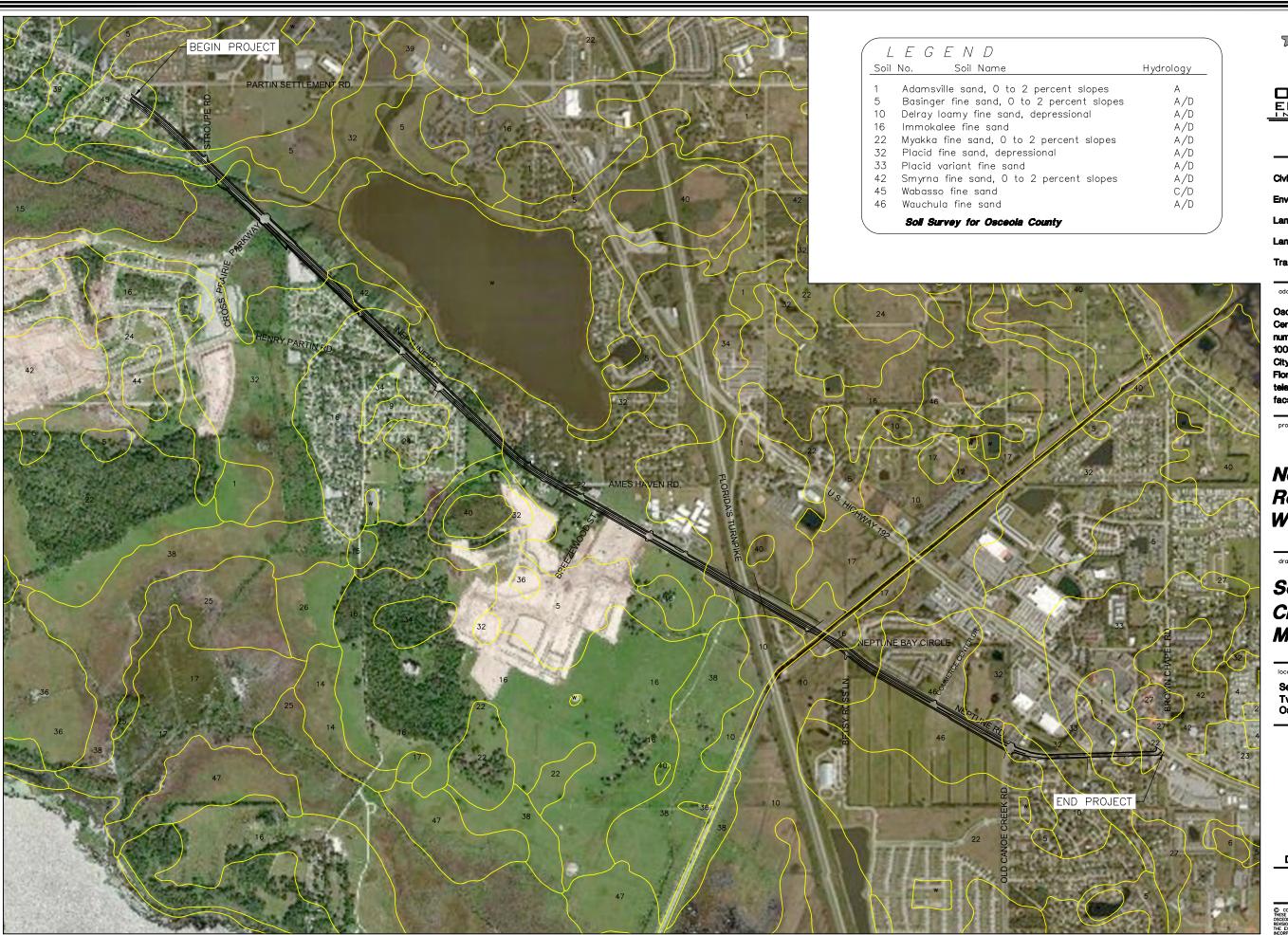




Scale: 1" = 250'

Date: February 15, 2019

FIGURE 2F





Environmental Engineers

Landscape Architects

Land Planners &

Transportation Engineers

address

Osceola Engineering Incorporated
Certificate of Authorization
number# 00026265
1003 Florida Avenue
City of Saint Cloud
Florida 34769
telephone: (407) 891-0452
facsimile: (407) 891-9173

project:

Neptune Road Widening

drawina

Soils Classification Map

locatio

Sec 04, 05, 25, 26, 31, 32 Twp 28 S., Rng 30 E. Osceola County, Florida



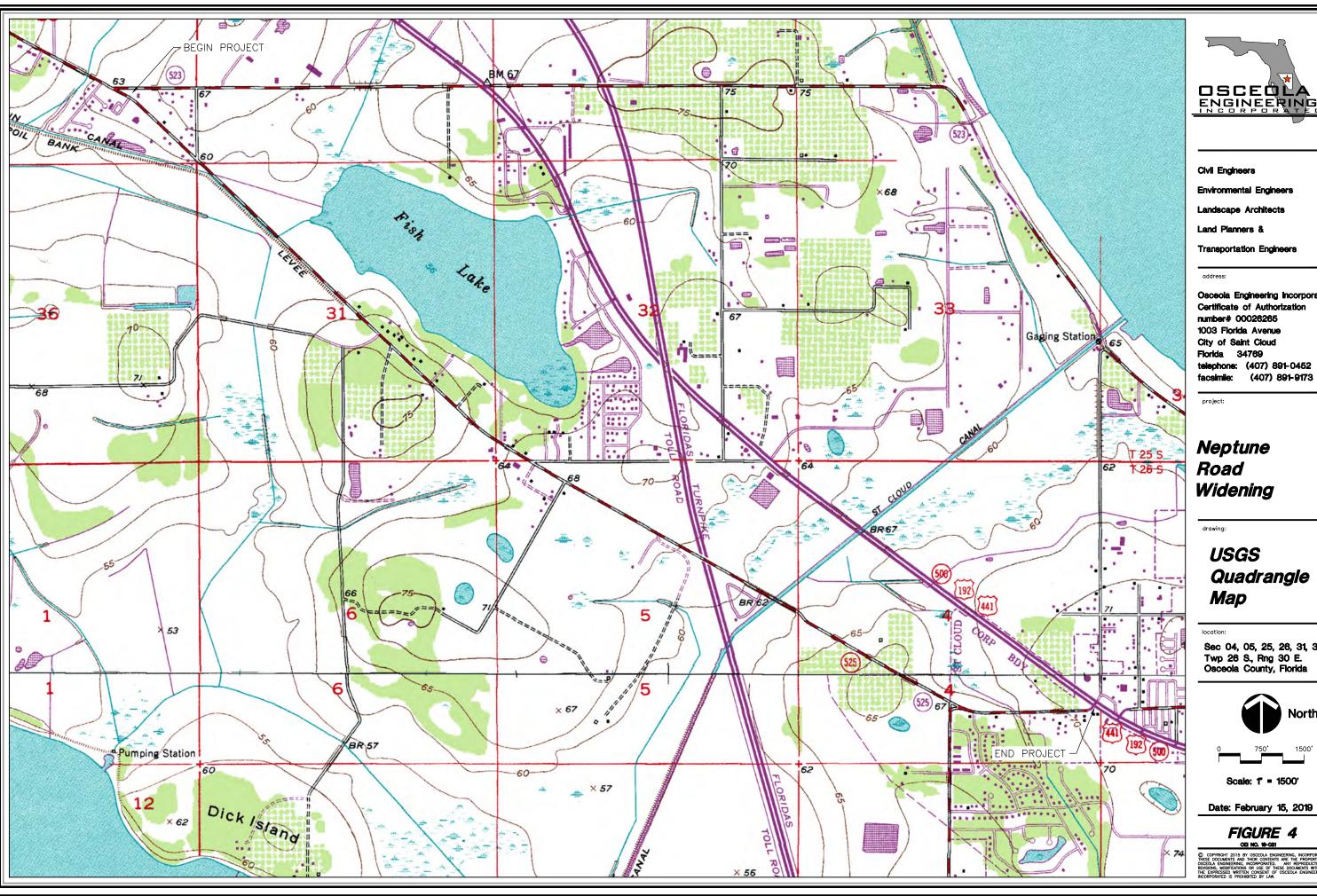


Scale: 1" = 1500'

Date: February 15, 2019

FIGURE 3

© COPYRIGHT 2015 BY OSCEOLA ENGINEERING, INCORPORAT THESE DOCUMENTS AND THEIR CONTENTS ARE THE PROPERTY OSCEOLA ENGINEERING, INCORPORATED. ANY REPRODUCTION REVISIONS, MODIFICATIONS OR USE OF THESE DOCUMENTS WITHO THE EXPRESSED WRITTEN CONSENT OF OSCEOLA ENGINEERIN INCORPORATED IS PROHIBITED BY LAW.





Osceola Engineering Incorporated Certificate of Authorization telephone: (407) 891-0452

Quadrangle

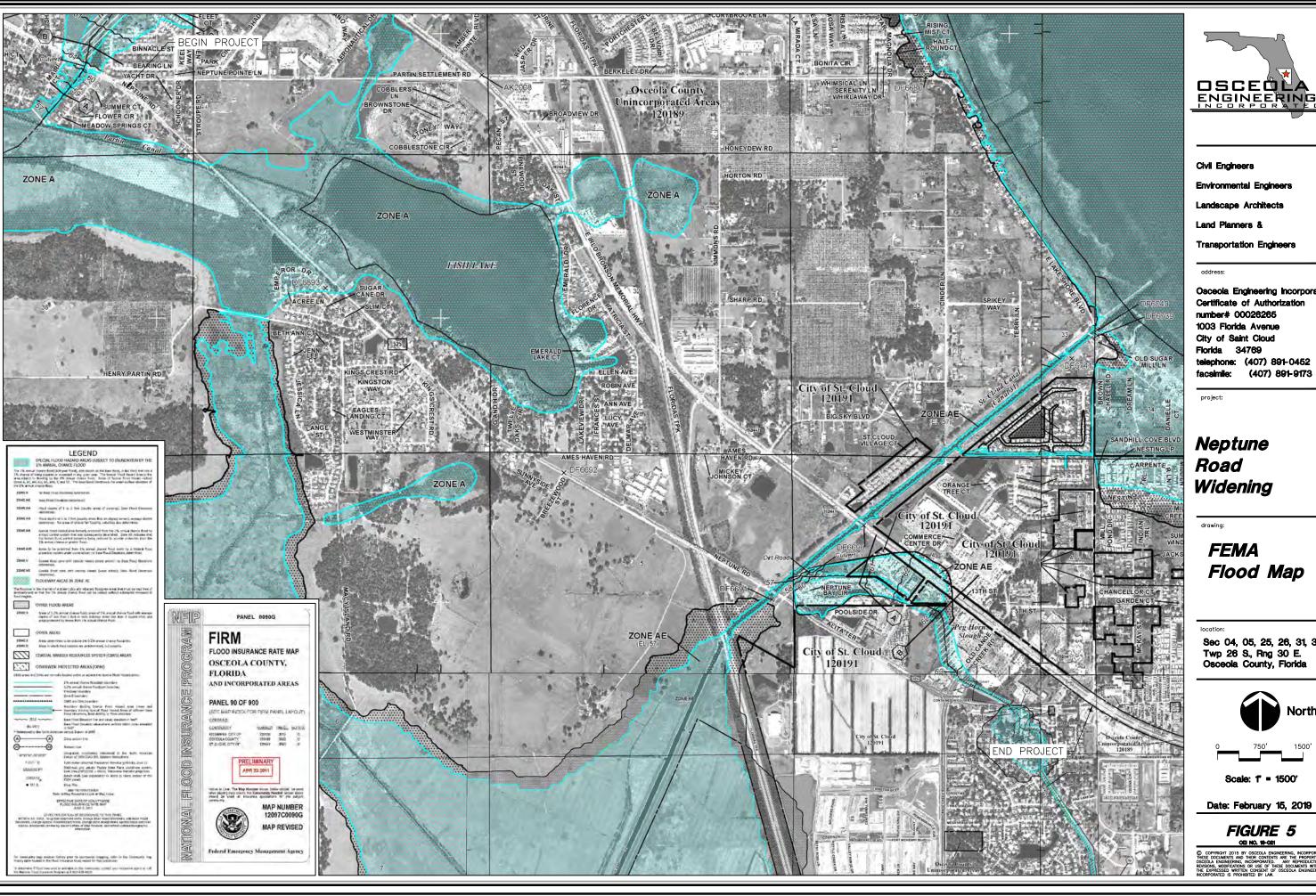
Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida





Date: February 15, 2019

FIGURE 4





Osceola Engineering Incorporated Certificate of Authorization telephone: (407) 891-0452

Flood Map

Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida



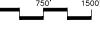


FIGURE 5





Environmental Engineers

Landscape Architects

Land Planners &

Transportation Engineers

ddress:

Osceola Engineering Incorporated Certificate of Authorization number# 00026265 1003 Florida Avenue City of Saint Cloud Florida 34769

telephone: (407) 891-0452 facsimile: (407) 891-9173

project:

Neptune Road Widening

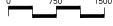
drawing

Outfall Location Map

locatio

Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida



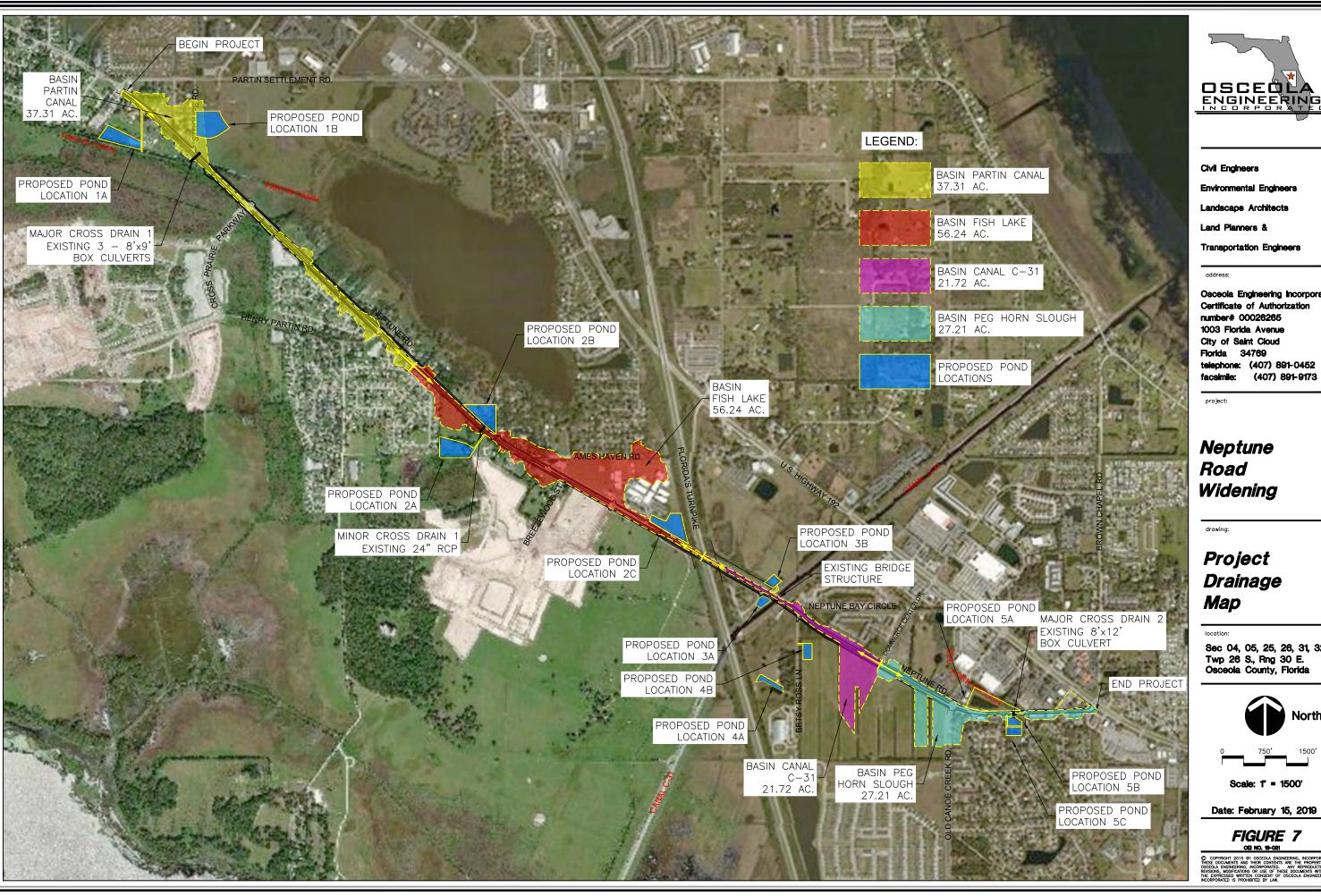


Scale: 1" = 1500'

Date: February 15, 2019

FIGURE 6

© COPYRIGHT 2015 BY OSCEOLA ENGINEERING, INCORPORAT THESE DOCUMENTS AND THEIR CONTENTS ARE THE PROPERTY OSCEOLA ENGINEERING, INCORPORATED. ANY REPRODUCTION REVISIONS, MODIFICATIONS OR USE OF THESE DOCUMENTS WITHOUT THE EXPRESSED WRITTEN CONSENT OF OSCEOLA ENGINEERIN





Osceola Engineering Incorporated Certificate of Authorization 1003 Florida Avenue telephone: (407) 891-0452

Sec 04, 05, 25, 26, 31, 32 Twp 26 S., Rng 30 E. Osceola County, Florida

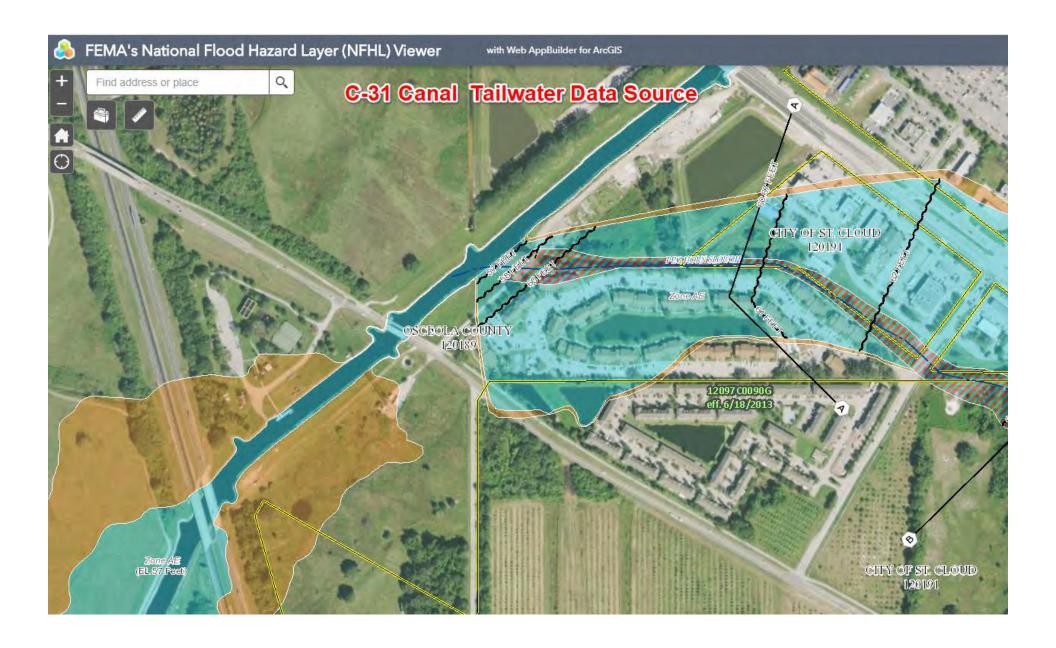




FIGURE 7







FLOODING S	FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
PEG HORN SLOUGH								
Α	1,300	34	215	5.1	60.7	60.7	61.2	0.5
В	3,022	205	879	1.2	62.4	62.4	62.7	0.3
С	5,432	47	413	2.2	63.0	63.0	63.5	0.5
D	7,200	55	517	1.7	65.4	65.4	66.1	0.7
Е	9,491	56	524	0.8	66.1	66.1	67.0	0.9
F	9,831	21	188	2.2	66.1	66.1	67.0	0.9
G	10,346	46	420	1.0	66.7	66.7	67.6	0.9
Н	14,436	55	524	0.9	68.0	68.0	68.9	0.9
1	14,751	22	198	2.3	68.0	68.0	68.8	0.8
J	15,575	54	471	1.0	69.8	69.8	70.6	0.8
K	16,150	46	243	1.9	69.8	69.8	70.6	0.8
L	17,117	444	1,587	0.3	71.6	71.6	71.9	0.3

¹ Stream distance in feet above confluence with St. Cloud Canal (Canal 31)

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

OSCEOLA COUNTY, FL AND INCORPORATED AREAS **FLOODWAY DATA**

PEG HORN SLOUGH

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning N Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs	
FISH LAKE	BASE	R 100 72	75.54	59.397	58.000	0.0001	17499649	60.00	2779.516	85.52	210.174	
FISH LAKE	BASE	R 10 24	27.45	57.191	58.000	0.0001	13988171	12.00	1872.811	36.52	133.930	
FISH_LAKE	BASE	R_10_72	74.71	57.810	58.000	0.0001	14973874	60.00	1626.862	84.72	171.043	
NEP PARTIN DS	BASE	R 100 72	73.30	59.300	60.000	0.0003	37585	85.46	216.985	85.45	217.203	
NEP PARTIN DS	BASE	R 10 24	24.00	57.080	60.000	0.0004	18904	36.37	137.653	36.34	137.865	
NEP_PARTIN_DS	BASE	R_10_72	72.00	57.718	60.000	0.0003	20914	84.47	174.247	84.47	174.413	
NEP PARTIN US	BASE	R 100 72	73.57	59.309	60.000	-0.0030	21807	85.52	210.174	85.52	210.300	
NEP PARTIN US	BASE	R 10 24	24.00	57.081	60.000	-0.0030	21807	36.52	133.930	36.49	134.182	
NEP PARTIN US	BASE	R 10 72	72.00	57.721	60.000	-0.0030	21807	84.72	171.043	84.72	171.227	

These Flood stages are excerpts form the County Drainage Study for Bass Slough

CULTURAL RESOURCE ASSESSMENT SURVEY NEPTUNE ROAD PD&E STUDY FROM PARTIN SETTLEMENT ROAD TO US 192, OSCEOLA COUNTY, FLORIDA

FINANCIAL MANAGEMENT No. 445415-1 ETDM No. 14402 SEARCH PROJECT No. 180211

PREPARED FOR

OSCEOLA COUNTY, FLORIDA, DEPARTMENT OF TRANSPORTATION AND TRANSIT

1 COURTHOUSE SQUARE
KISSIMMEE, FLORIDA 34741

By

SEARCH

OCTOBER 2019

CULTURAL RESOURCE ASSESSMENT SURVEY NEPTUNE ROAD PD&E STUDY FROM PARTIN SETTLEMENT ROAD TO US 192, OSCEOLA COUNTY, FLORIDA

FINANCIAL MANAGEMENT NO. 445415-1 EDTM No. 14402 SEARCH PROJECT NO. 180211

PREPARED FOR

OSCEOLA COUNTY, FLORIDA, DEPARTMENT OF TRANSPORTATION AND TRANSIT

1 COURTHOUSE SQUARE

KISSIMMEE, FLORIDA 34741

PREPARED BY

SEARCH

STEVEN RABBYSMITH, MA, RPA, CHRIS SYPNIEWSKI MA, RPA, MIKEL TRAVISANO, MS, ALLEN KENT PHD, AND MATT NOWAK, BS

STEVEN RABBYSMITH, MA
PRINCIPAL INVESTIGATOR, ARCHAEOLOGY

MIKEL TRAVISANO, MS
PRINCIPAL INVESTIGATOR, ARCHITECTURAL HISTORY

WWW.SEARCHINC.COM

OCTOBER 2019

EXECUTIVE SUMMARY

This report details the results of a cultural resource assessment survey (CRAS) conducted in support of proposed improvements to County Road (CR) 525/Neptune Road in Osceola County, Florida. The project, being carried out by the Osceola County Department of Transportation and Transit, involves a 3.9-mile (6.3-kilometer) segment of Neptune Road extending from Partin Settlement Road to US 192 in Osceola County. The section east of the St. Cloud Canal (approximately 1.1 miles [1.8 kilometers] in length) is within the City of St. Cloud. From Partin Settlement Road to Old Canoe Creek Road, the proposed project improves the existing two-lane roadway to a four-lane divided roadway with a curbed median and premium bicycle and pedestrian facilities (i.e., bike lanes, multiuse path(s), and/or sidewalks). From Old Canoe Creek Road to US 192, the project widens the existing two-lane roadway to four lanes with sidewalks. Bridge structures are to be replaced and stormwater management facilities will be evaluated. The bridge structures include one that crosses over Florida's Turnpike and the St. Cloud Canal, which is under the jurisdiction of South Florida Water Management District (SFWMD). No archaeological survey was conducted within the SFWMD canal; therefore, securing a permit was unnecessary. The roadway widening will require the acquisition of up to 191 feet (58.2 meters) of additional right-of-way, a total of 16.7 acres. The Neptune Road improvements project is currently being conducted using local funding administered by Osceola County and in coordination with the Florida Department of Transportation (FDOT), District 5. In anticipation of future federal involvement, the CRAS and other aspects of the Project Development and Environment (PD&E) study were carried out in accordance with the provisions of the National Environmental Policy Act (NEPA) under which a Type 2 Categorical Exclusion will be sought.

The Area of Potential Effects (APE) was defined to include the existing and proposed right-of-way and was extended to the back or side property lines of parcels adjacent to the right-of-way, or a distance of no more than 328 feet (100 meters) from the maximum right-of-way line. The archaeological survey was conducted within the existing and proposed right-of-way. The historic structure survey was conducted within the entire APE.

The archaeological survey consisted of a thorough pedestrian survey within the current and proposed project right-of-way, which included the excavation of 39 subsurface tests. Ground disturbance resulting from buried utilities and drainage features prevented subsurface archaeological testing throughout much of the APE. Of the 39 excavated shovel tests, nine were positive for cultural material, resulting in the documentation of one new archaeological site, 80S02984. Site 80S02984 is recommended ineligible for the National Register of Historic Places (NRHP) based on the level of disturbance and the unremarkable nature of the artifact assemblage.

The architectural survey resulted in the identification and evaluation of 40 historic resources within the Neptune Road APE, including two previously recorded resources and 38 newly recorded resources. The previously recorded resources include one historic canal (80S02752) and one historic railway (80S02822). The newly recorded resources include one historic mobile

home park (80S02983); two historic canals (80S02981 and 80S02982); three historic bridges (80S02942-80S02944); and 32 historic structures (80S02945-80S02976).

One resource within the Neptune Road APE is NRHP-eligible. A segment of the St. Cloud Canal (8OS02752) was determined NRHP-eligible by the Florida State Historic Preservation Officer (SHPO) on April 24, 2014 (SEARCH 2014). That segment of the St. Cloud Canal (8OS02752) is considered significant under Criterion A for its association with land reclamation activities in Osceola County, which helped spur the development of the county, and Criterion C as an example of a nineteenth-century canal. Furthermore, SEARCH recommends the portion of the St. Cloud Canal (8OS02752) within the Neptune Road APE locally significant under Criterion B for its association with Hamilton Disston, an important figure in Osceola County history. Based on the historic context and the results of the present survey, SEARCH recommends that the segment of the St. Cloud Canal (8OS02752) within the Neptune Road APE eligible as contributing to the overall NRHP-eligible St. Cloud Canal (80S02752). A portion of the St. Cloud and Sugar Belt Railway (80S02822) was determined ineligible for the NRHP by SHPO on September 4, 2015 (Dickinson and Wayne 2015). It is the opinion of SEARCH that the section of the St. Cloud and Sugar Belt Railway (8OS02822) within the Neptune Road APE remains ineligible for the NRHP due to a lack of historic integrity. The remaining 38 historic resources within the Neptune Road APE are recommended ineligible due to a lack of historic significance.

Within the Neptune Road APE, the St. Cloud Canal (80S02752) runs northeast-southwest for 0.12 miles (0.2 kilometers) between Florida's Turnpike (State Road [SR] 91) and US 441 (SR 500) in Osceola County. Proposed improvements along the St. Cloud Canal (80S02752) include the reconstruction of the two-lane road into a four-lane divided roadway on a new bridge across In addition, the project proposes incorporating an existing recreational trail (Neptune Road Trail), located to the north, into the new bridge and constructing a new trail to the southeast-southwest, which also will cross the new bridge. The proposed bridge is 140 feet (42.7 meters) long by 105 feet (32 meters) wide and includes three bents to be placed into the canal. Bridge plans are included in Appendix A. None of the proposed improvements, including the new road and bridge over the St. Cloud Canal (80S02752), will dramatically alter the integrity of the canal. Two bridges already span the canal within the Neptune Road APE, and they have not diminished the integrity of the canal. Based upon a review of the current plans, the proposed work will not involve rerouting of the canal, disruption of the canal, widening or loss of width or the severing of the canal from other waterways. While the proposed project will acquire 0.3 acres within the St. Cloud Canal right-of way, none of the proposed improvements will diminish the integrity of the St. Cloud Canal (80S02752) or its ability to express the characteristics that make it eligible for listing in the NRHP. As such, the proposed improvements will have no adverse effect on 80S02752. No further architectural work is recommended.

Based on the results of the CRAS, it is the opinion of SEARCH that the proposed improvements to Neptune Road will have no adverse effect on 80S02752 or any other resources listed or eligible for listing in the NRHP. No further work is recommended.

TABLE OF CONTENTS

Executive Sur	nmary	iii
Table of Cont	ents	v
List of Figures		vii
List of Tables		ix
Introduction		1
	on and Environment	
-	and Modern Conditions	
	ronment	
	/iew	
	nerican Culture History	
	Osceola County	
	lesearch	
•	aster Site File Review	
	lap and Aerial Photograph Review	
	ign	
	oals	
•	eria	
Cultural R	esource Potential	26
	ethods	
Archaeolo	gical Resources	28
Architectu	ıral Resources	40
NRHP Eva	luations	53
Conclusion ar	nd Recommendations	67
References Ci	ted	70
Appendix A:	Bridge Plans	
Appendix A. Appendix B:	Marked Field Maps	
Appendix C:	Field Specimen Log	
Appendix C. Appendix D:	Historic Resources Descriptions and Evaluations	
Appendix E:	FMSF Resource Forms	
Appendix F:	FDHR Survey Log Sheet	
, .ppca.x 1 .	. 5 54. 75, 256 5	

This page intentionally left blank.

LIST OF FIGURES

Figure 1.	Location of the Neptune Road widening project in Osceola County, Florida	. 2
Figure 2.	Topographic map showing the Neptune Road APE in Osceola County, Florida	3
Figure 3.	Soil drainage characteristics within the Neptune Road APE and right-of-way	. 5
Figure 4.	Previous documented cultural resources and surveys that intersect the Neptune	
	Road APE.	17
Figure 5.	GLO maps of Township 25 South, Ranges 29 and 30 East and Township 26 South,	20
	Ranges 29 and 30 East (GLO 1844, 1848, 1849a, 1849b)	
Figure 6.	1944 USDA aerial photographs of Osceola County, Florida	21
Figure 7.	USGS topographic maps of St. Cloud North and St. Cloud South, Florida (USGS	
	1954a, 1954b)	22
Figure 8.	USGS topographic maps of St. Cloud North and St. Cloud South, Florida (USGS	
	1972a, 1972b)	24
Figure 9.	Representative photographs of the Neptune Road APE. Top left: View east along Neptune Road in the eastern end of the project corridor. Note the level of development and presence of buried utilities in the APE. Top right: View east near the middle of the Neptune Road APE. Note the presence of a graded right-of-way with gas and water flags identifying buried utilities. Center left: View west near the center of the Neptune Road APE depicted the road crossing over the Florida Turnpike. Center right: View east along Neptune Road in the western end of the project corridor. Note the level of development and presence of buried utilities in the APE. Bottom left: Excavated shovel test near the middle of the Neptune Road APE depicting a stratified silty sand. Bottom right: Excavated shovel test from the eastern portion of the APE. Note the level of disturbance likely associated with road construction.	29
Figure 10.	Results of archaeological testing in the Neptune Road archaeological APE, map 1 of 6.	30
Figure 11.	Results of archaeological testing in the Neptune Road archaeological APE, map 2	
	of 6	31
Figure 12.	Results of archaeological testing in the Neptune Road archaeological APE, map 3	
	of 6	32
Figure 13.	Results of archaeological testing in the Neptune Road archaeological APE, map 4	
	of 6	33
Figure 14.	Results of archaeological testing in the Neptune Road archaeological APE, map 5 of 6.	34
Figure 15.	Results of archaeological testing in the Neptune Road archaeological APE, map 6 of 6.	35
Figure 16	Overview of 8OS02984, view west.	
_	Results of archaeological testing within boundary of 80S02984	
	Left: Representative soil profile from a positive shovel test within the boundary	-
. 1801 C 10.	of 80S02984. Right: 1944 USDA aerial photograph of Osceola County, Florida.	
	Note the presence of a historic structure just northwest of the location of	
	80S02984 (yellow star).	30
	OOSOZSOT (yellow stal).	ככ

Figure 19.	Historic resources recorded within the Neptune Road APE, map 1 of 74	2
Figure 20.	Historic resources recorded within the Neptune Road APE, map 2 of 74	3
Figure 21.	Historic resources recorded within the Neptune Road APE, map 3 of 74	4
Figure 22.	Historic resources recorded within the Neptune Road APE, map 4 of 74	5
Figure 23.	Historic resources recorded within the Neptune Road APE, map 5 of 74	6
Figure 24.	Historic resources recorded within the Neptune Road APE, map 6 of 74	7
Figure 25.	Historic resources recorded within the Neptune Road APE, map 7 of 74	8
Figure 26.	Resource 8OS02968 provides an example of a Mobile Home within the Neptune	
	Road APE. Photograph facing southeast4	.9
Figure 27.	Resource 8OS02954 provides an example of the Masonry Vernacular style within	
	the Neptune Road APE. Photograph facing northeast5	0
Figure 28.	Resource 8OS02971 provides an example of the Frame Vernacular style within	
	the Neptune Road APE. Photograph facing west5	0
Figure 29.	Resource 8OS02953 provides an example of the Ranch style within the Neptune	
	Road APE. Photograph facing northeast5	1
Figure 30.	Resource 8OS02956 provides an example of the Mid-Century Modern style	
	within the Neptune Road APE. Photograph facing northeast5	2
Figure 31.	Representative views of Resource 8OS02752 within the Neptune Road APE. Top	
	left: Facing northeast; top right: facing east; bottom left: facing east; bottom	
	right: facing southwest5	4
Figure 32.	St. Cloud Canal running through the Disston sugar plantation, ca. 1900. Source:	
	Florida Memory, No. RC026785	5
Figure 33.	Representative views of Resource 8OS02822 within the Neptune Road APE. Left:	
	facing northwest; right: facing southeast5	
_	Resource 8OS02981, facing northwest5	9
Figure 35.	Representative views of Resource 80S02982 within the Neptune Road APE. Left:	
	facing southeast; right: facing southeast6	0
Figure 36.	Representative views of Resource 8OS02942 within the Neptune Road APE. Left:	
	facing southeast; right: facing northeast	
	Resource 80S02943, facing northwest	3
Figure 38.	Representative views of Resource 80S02944 within the Neptune Road APE. Top	
	left: facing northeast; top right: facing east; bottom left: facing east; bottom	
	right: facing south	4
Figure 39.	Aerial photograph of 80S02983 showing the layout of the mobile home park and	
E: 40	Fish Lake access; north is located to the right. Source: FDOT 2017	5
rigure 40.	Representative photographs of 80S02983 within the Neptune Road APE. Top	
	left: facing north; top right: facing northwest; bottom left: facing southeast;	
	bottom right: facing northwest	b

LIST OF TABLES

Table 1.	Soil Types and Drainage within the Neptune Road APE	(
Table 2.	Previous Cultural Resource Assessment Surveys that Intersect the Neptune	Road
	APE	16
Table 3.	Previously Recorded Cultural Resources within the Neptune Road APE	18
Table 4.	Diagnostic Artifacts Recovered from 8OS02984	39
Table 5.	Historic Resources Recorded within the Neptune Road APE	40
Table 6.	Major Architectural Styles within the Neptune Road APE	49

This page intentionally left blank.

INTRODUCTION

This report details the results of a cultural resource assessment survey (CRAS) conducted in support of proposed improvements to Neptune Road in Osceola County, Florida. The project, being carried out by the Osceola County Department of Transportation and Transit, involves a 3.9-mile (6.3-kilometer) segment of Neptune Road extending from Partin Settlement Road to US 192 in Osceola County (Figure 1). The section east of the St. Cloud Canal (approximately 1.1 miles [1.8 kilometers] in length) is within the City of St. Cloud. From Partin Settlement Road to Old Canoe Creek Road, the proposed project improves the existing two-lane roadway to a four-lane divided roadway with a curbed median and premium bicycle and pedestrian facilities (i.e., bike lanes, multiuse path(s), and/or sidewalks). From Old Canoe Creek Road to US 192, the project widens the existing two-lane roadway to four lanes with sidewalks. Bridge structures are to be replaced and stormwater management facilities will be evaluated. The bridge structures include one that crosses over Florida's Turnpike and the South Florida Water Management District (SFWMD) canal known as the St. Cloud Canal. No archaeological survey was conducted within the SFWMD canal; therefore, securing a permit was unnecessary. The roadway widening will require the acquisition of up to 191 feet (58.2 meters) of additional right-of-way, a total of 16.7 acres. The Neptune Road improvements project is currently being conducted using local funding administered by Osceola County and in coordination with the Florida Department of Transportation (FDOT), District 5. In anticipation of future federal involvement, the CRAS and other aspects of the Project Development and Environment (PD&E) study were carried out in accordance with the provisions of the National Environmental Policy Act (NEPA) under which a Type 2 Categorical Exclusion will be sought.

The Area of Potential Effects (APE) was defined to include the existing and proposed right-of-way and was extended to the back or side property lines of parcels adjacent to the right-of-way, or a distance of no more than 328 feet (100 meters) from the maximum right-of-way line (**Figure 2**). The archaeological survey was conducted within the existing and proposed right-of-way. The historic structure survey was conducted within the entire APE.

The purpose of the survey was to locate, identify, and delineate any archaeological resources, historic structures, and potential districts within the project APE and assess their potential for listing in the National Register of Historic Places (NRHP). This study was conducted to comply with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code. All work was performed in accordance with Part 2, Chapter 8 of the FDOT's PD&E Manual (revised January 2019), as well as 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*. The FDOT PD&E manual acknowledges assignment of the Federal Highway Administration's (FHWA)'s regulatory responsibilities under NEPA to FDOT pursuant to Title 23 U.S.C. § 327, and the implementing Memorandum of Understanding executed on December 14 2016. This study also complies with Public Law 113-287 (Title 54 U.S.C.), which incorporates the provisions of the National Historic Preservation Act (NHPA) of 1966, as amended, and the

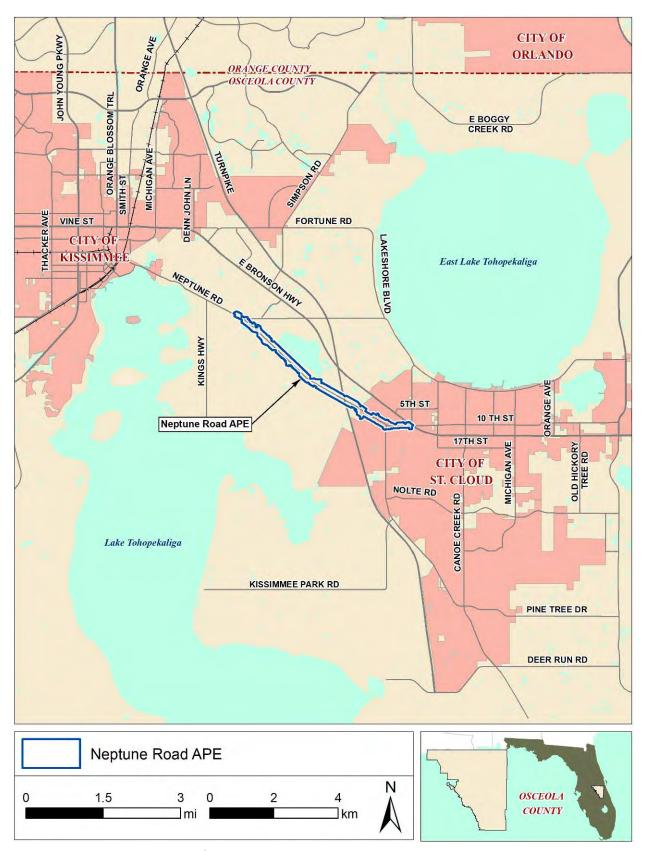


Figure 1. Location of the Neptune Road widening project in Osceola County, Florida.

Introduction 2



Figure 2. Topographic map showing the Neptune Road APE in Osceola County, Florida.

Archeological and Historic Preservation Act of 1979, as amended. The study was conducted in accordance with the regulations for implementing NHPA Section 106 found in 36 CFR Part 800 (Protection of Historic Properties). The Principal Investigator for this project meets the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716-42).

Steven RabbySmith, MA, RPA, served as the Principal Investigator, and Mikel Travisano, MS, served as Architectural Historian. The report was written by Chris Sypniewski, MA, RPA, Mr. RabbySmith, Mr. Travisano, Allen Kent, PhD, and Matt Nowak, BA. The fieldwork was conducted by Mr. Sypniewski, Sarah Bennett, MA, RPA, Angelica Costa, MA, and Jonah Gottschalk. Melissa Dye, MA, RPA, conducted the quality-control review, and Carol Rose, BA, Rasha Slepow, BS, and Ali Sundook, BA, edited and produced the document.

PROJECT LOCATION AND ENVIRONMENT

LOCATION AND MODERN CONDITIONS

The project area totals approximately 367 acres along a 3.9-mile (6.3-kilometer) segment of Neptune Road from Partin Settlement Road to US 192 in Osceola County, Florida. The project area is located southwest of East Lake Tohopekaliga, with an approximately 1.1-mile (1.8-kilometer) segment that crosses through the St. Cloud city limits. Within the Public Land Survey System, the project corridor is situated within Section 25 of Township 25 South, Range 29 East; Sections 31 and 32 of Township 25 South, Range 30 East; and Sections 4 and 5 of Township 26 South, Range 30 East.

Development in the area is characterized predominantly by residential structures. Many of the residential structures are included in subdivisions, particularly in the northern and southern ends of the project corridor; however, the southern shore of Fish Lake along the north side of Neptune Road is characterized by large parcels with single-family homes. The eastern half of the project area, particularly on the south side of the road, is predominantly agricultural.

Geologically, the project area is located in the Kissimmee Valley province of the Eastern Flatwoods district. The Eastern Flatwoods district is known as the Coastal Lowlands and began as barrier islands that date from the Plio-Pleistocene to recent time (Brooks 1981). The Kissimmee Valley province consists of lagoon deposits of river swamp and grassland prairies underlain by silty sands that are seasonally flooded and are typically higher than 50 feet (15.2 meters) above mean sea level (Brooks 1981). Soils within the project right-of-way range from very poorly drained to somewhat poorly drained (**Table 1**; **Figure 3**). Poorly drained soils are the predominant soil type and account for approximately 78 percent of the project right-of-way, while very poorly drained soils account for much of the rest of the project corridor (20 percent) (US Department of Agriculture, Natural Resources Conservation Service [USDA NRCS] 2018).

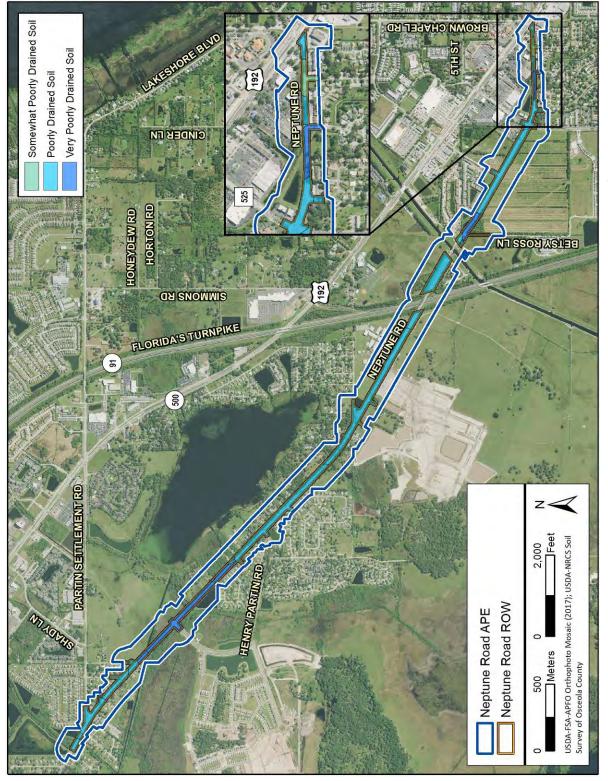


Figure 3. Soil drainage characteristics within the Neptune Road APE and right-of-way.

Table 1. Soil Types and Drainage within the Neptune Road APE.

Name	Drainage	Acres	Percentage
Somewhat Poorly Drained Soils			
Placid variant fine sand	Somewhat Poorly Drained	0.03	
Adamsville sand, 0 to 2 percent slopes	Somewhat Poorly Drained	0.9	
So	mewhat Poorly Drained Total	0.93	1.40 %
Poorly Drained Soils			
Basinger fine sand, 0 to 2 percent slopes	Poorly Drained	1.52	
Wabasso fine sand, 0 to 2 percent slopes	Poorly Drained	3.52	
Immokalee fine sand, 0 to 2 percent slopes	Poorly Drained	24.06	
Wauchula fine sand, 0 to 2 percent slopes	Poorly Drained	8.80	
Myakka fine sand, 0 to 2 percent slopes	Poorly Drained	14.03	
Smyrna fine sand, 0 to 2 percent slopes	Poorly Drained	0.88	
Pompano fine sand, 0 to 2 percent slopes	Poorly Drained	0.89	
	Poorly Drained Totals	53.70	78.20%
Very Poorly Drained Soils			
Placid fine sand, depressional, frequently flooded, 0 to 1	Very Poorly Drained	4.02	
percent slopes Samsula muck, frequently ponded, 0 to 1 percent slopes	Very Poorly Drained	7.15	
Kaliga muck, frequently ponded, 0 to 1 percent slopes	Very Poorly Drained	0.01	
Delray loamy fine sand, depressional	Very Poorly Drained	2.82	
Delitay loarry fine sand, depressional	Very Poorly Drained Totals	14.00	20.40%
	Total Acres	68.63	100%

PALEOENVIRONMENT

Between 18,000 to 12,000 years before present (BP), Florida was a much cooler and drier place than it is today. Melting of the continental ice sheets led to a major global rise in sea level (summarized for long time scales by Rohling et al. 1998) that started from a low stand of -120 meters at 18,000 BP. The rise was slow while glacial conditions prevailed at high latitudes but became very rapid in the latest Pleistocene and earliest Holocene. It became warmer and wetter rather rapidly during the next three millennia. By about 9000 BP, a warmer and drier climate began to prevail. These changes were more drastic in northern Florida and southern Georgia than in southern Florida, where the "peninsular effect" and a more tropically influenced climate tempered the effects of the continental glaciers that were melting far to the north (Watts 1969, 1971, 1975, 1980). Sea levels, though higher, were still much lower than at present; surface water was limited, and extensive grasslands probably existed, which may have attracted mammoth, bison, and other large grazing mammals. By 6000-5000 BP, the climate had changed to one of increased precipitation and surface water flow. By the late Holocene, ca. 4000 BP, the climate, water levels, and plant communities of Florida attained essentially modern conditions. These have been relatively stable with only minor fluctuations during the past 4,000 years.

HISTORIC OVERVIEW

Native American Culture History

The following prehistoric overview of central Florida consists of a four-part chronology, with each period based on distinct cultural and technological characteristics recognized by archaeologists. From oldest to most recent, the four temporal periods are Paleoindian, Archaic, Post-Archaic, and Contact.

Paleoindian Period (10,000-8000 BP)

The most widely accepted model for the peopling of the Americas argues that populations originating in Asia crossed the Beringia land bridge that formerly linked Siberia to Alaska and entered the North American continent some 12,000 years ago (Smith 1986). However, data have mounted in support of entry prior to 12,000 years ago (Adovasio et al. 1990; Dillehay et al. 2008). Alternative pre-12,000 BP migration routes that have been hypothesized include populations traveling along the Pacific and Atlantic coasts using boats or following an exposed shoreline (Anderson and Gillam 2000; Bradley and Stanford 2004; Dixon 1993; Faught 2008; Fladmark 1979). Many of their early occupation sites would now be inundated as a result of higher sea levels. Recent evidence from the Page-Ladson site (8JE00591) provides the earliest evidence of human occupation of Florida, approximately 14,500 years ago (Halligan et al. 2016). Butchered mammoth remains and lithic debitage, as well as a single biface, were recovered from intact deposits in an underwater sinkhole at the Aucilla River. This find fits with an increasingly broad acceptance of a rapid pre-Clovis peopling of the Americas. The conventional view of Paleoindian existence in Florida is that they were nomadic hunters and gatherers who entered an environment quite different than that of the present.

The Paleoindian Database of the Americas (PIDBA) is the leading repository for information regarding the distribution of Paleoindian sites in North America (Anderson et al. 2010). The current PIDBA locational database lists no Paleoindian points for Osceola County. However, Paleoindian points have been reported in two of the five counties that border it, including four Suwannee points from Brevard County and six points (four Clovis and two Suwannee) from Polk County (PIDBA 2018).

Archaic Period (8000-500 BC)

Around 8000 BC, the environment and physiology of Florida underwent pronounced changes due to climatic amelioration. These changes were interconnected and include a gradual warming trend, a rise in sea levels, a reduction in the width of peninsular Florida, and the spread of oak-dominated forests and hammocks throughout much of Florida (Milanich 1994; Smith 1986). Concomitant with these environmental changes were alterations in native subsistence strategies, which became more diverse due to the emergence of new plant, animal,

and aquatic species. Also occurring at this time was a significant increase in population numbers and density, with native groups developing regional habitat-specific adaptations and material assemblages (Milanich 1994; Smith 1986:10). As conditions became wetter, coastal, riparian, and lacustrine adaptations became increasingly more common. The Archaic period is typically divided into the Early, Middle, and Late subperiods by archaeologists.

In central Florida, evidence of the earliest occupations usually consists of lithic scatters containing chert debitage and occasionally projectile points. While Early Archaic Bolen projectile points have been recovered at sites in central Florida, Middle Archaic points, such as Hardee, Sumter, Alachua, Putnam, and Newnan, are typically much more common (Smith and Bond 1984:53-55). As life became more settled during the Archaic period, an array of site types evolved that included residential bases, short-term settlements, specialized procurement camps, and cemeteries (Milanich 1994:75-85). Collectively, these comprised the regional settlement-subsistence system.

The trend toward increased sedentism and more circumscribed territories continued into the Late Archaic period, as environmental and climatic conditions approached those of today. This period is characterized by the emergence of ceramic traditions and the inception of limited horticulture (Sassaman 1993). The development of pottery occurred around 2000 BC. Referred to as Orange pottery by archaeologists, this early ceramic ware was tempered with vegetal fibers such as thin strands of palmetto or Spanish moss (Bullen 1972; Griffin 1945). During a span of approximately 1,500 years, plain, incised, and punctated types were produced; however, decorated variants underwent periods of stylistic popularity. Regarding vessel form, early pots were hand molded and tended to be thick walled, whereas some of the later vessels were thinner and formed by coiling. While Orange pottery is found sparingly throughout Florida, it is primarily recovered in eastern and central portions of the state.

Another early fiber-tempered ceramic type, Norwood, extended from the Gulf coast to the Orange series on the East coast. Norwood pottery is usually undecorated or stick impressed. A variety of the later Deptford simple-stamped ceramic ware found on the Gulf coast also is stick impressed and seems to be derived from the earlier Norwood ceramic assemblage (Milanich and Fairbanks 1980).

A third fiber-tempered ceramic variant, Tick Island Incised, was produced at the same time as Orange series ware and occurred in the Upper St. Johns River drainage area. The designs incised onto the exterior of Tick Island ware were curvilinear and incorporated small dashes or punctations. A typical design used concentric circles and small dashes between the lines of the circle. This type was somewhat localized and was not typical at sites outside of the Upper St. Johns area.

Woodland and Mississippian Periods (500 BC-AD 1565)

By about 500 BC, the cultural landscape of Florida had diversified with regionally distinct cultural traditions, including pottery types, subsistence practices, and settlement patterns.

Historic Overview 8

Milanich (1994) places the current survey area within the east and central Florida region. Within this region, the St. Johns culture grew directly out of the Orange culture. This is evidenced by the carryover of late Orange period designs to early St. Johns period pottery. St. Johns is characterized by chalky pottery tempered with sponge spicules and was produced between 500 BC and AD 1565. Other hallmarks of the post-Archaic periods include increased population and settlement numbers, construction of sand burial mounds, continued economic dependence on aquatic resources, and greater emphasis on plant cultivation (Goggin 1952:40; Milanich 1994:243-274).

In addition to St. Johns wares, sites in the region typically contain Glades and Belle Glade ceramics, which originate in the Lake Okeechobee region. These are more common in the south-central portion of this district, whereas purer St. Johns assemblages are found in the northern portion of the region (Sears 1959). Sites in this area are often characterized by freshwater shell and black earth middens located along the banks of inland rivers and lakes (Austin and Hansen 1988; Hardin et al. 1984).

Two major subdivisions are recognized within the St. Johns culture area, including the east and central Florida. These subdivisions are referred to as St. Johns I and St. Johns II. People of the St. Johns I culture (500 BC–AD 100) relied primarily upon hunting, fishing, and foraging. During this time, the resources found near freshwater wetlands, swamps, and the coastal zones were typically the most heavily exploited. St. Johns I sites are typically shell middens in coastal zones that contain St. Johns Plain and St. Johns Incised pottery.

The emergence of check stamping marks the beginning of the St. Johns II period around AD 750 and, along with plain pottery, dominates the assemblages throughout the period. During St. Johns II period, incised and punctated wares, possibly a reflection of Gulf coast influences, occur with some frequency in mounds and middens. The St. Johns II culture reached its apex in terms of social, political, and ceremonial complexity from AD 1050–1513. Classic Mississippian traits, such as the construction of large truncated mounds and the presence of Southern Cult burial paraphernalia in association with perceived elite burials, are evident (Milanich 1994; Smith 1986), indicating influence from northwest Florida. Some sand burial mounds were quite large and ceremonially complex, including truncated pyramidal mounds with ramps or causeways leading up to their summits (Milanich 1994:269-270). The rise in the number of St. Johns village and mound sites implies greater cultural complexity compared to that of the earlier St. Johns I period (Milanich 1994:267-274; Miller 1991). Shell and bone ornaments, worked copper, and other exotic materials and artifacts occur with some frequency in burial mounds (Goggin 1952; Milanich 1994).

In addition to the exploitation of aquatic resources for subsistence, it has been suggested that there was an increased dependence on horticulture during St. Johns II times (Goggin 1952; Milanich 1994:263-264). In fact, sixteenth-century French and Spanish documents allege that beans, squash, and maize were heavily cultivated by the Timucua of northern Florida (Bennett 1964, 1968, 1975; Lawson 1992), although direct evidence of prehistoric horticulture is lacking for the St. Johns region.

HISTORY OF OSCEOLA COUNTY

Early Exploration, 1513–1565

This historic context presents an overview of Osceola County from the early period of European contact to recent times. Florida served as an important stage for early European explorations of North America. Juan Ponce de León left Puerto Rico on March 3, 1513, and landed either north of Cape Canaveral (Brevard County) (Milanich 1995) or south of the Cape near modernday Melbourne Beach (Brevard County) on April 2, 1513 (Gannon 1996). Either landing spot puts Ponce de León east of present-day Osceola County. Even though the area had already been occupied and inhabited for thousands of years by indigenous groups, Ponce de León claimed Florida for Spain. Ponce de León called this land *La Florida*, since it was sighted during the Feast of Flowers (*Pascua Florida*) (Milanich 1995). Ponce de León was followed by Pánfilo de Narváez in 1528. Narváez landed near Tampa Bay and trekked into the interior of Florida, reaching the Apalachee region of west Florida in several months. He died later in the year when his fleet of ships sank en route to Mexico. Two survivors, Cabeza de Vaca and his companion, Estevan, began their 10-year trek from northwestern Florida across southern North America, representing the first contact of Europeans with many indigenous groups of the Southeast and Southwest (Clayton et al. 1995).

Cabeza de Vaca's account of his journey influenced subsequent explorers, particularly Hernando de Soto. In 1539, the de Soto expedition entered the peninsula near Bradenton (Manatee County) and traveled northward through the peninsula, though it is unlikely they traveled as far east as Osceola County. After some time traveling north, de Soto turned westward, going as far as Tallahassee, then turned north into what is now Georgia (Carswell 1991). First Spanish contact with natives of central Florida, including the Ais and Mayaca of present-day Osceola County, may have happened in the 1560s with the arrival of Pedro Menéndez de Avilés and the first permanent Spanish settlements at St. Augustine. Menéndez's many travels served to secure the territory for Spain and to ward off French interests in the peninsula. His attempts to rid the area of French influence and establish coastal settlements also took him inland to the lands of central Florida (Lyon 1996).

First Spanish Period, 1565-1763

Early Spanish settlements in Florida were concentrated on the coasts and in the northern half of the peninsula. Menéndez had been ordered by the crown to implement a massive missionizing effort among the Indians. He petitioned the Jesuit Order for missionaries, and they arrived in St. Augustine in June 1566 (Thomas 1990). The Jesuits focused their missionizing efforts on the native villages around St. Augustine, along the lower St. Johns River, and among the Guales and Oristas who lived farther north. A few missions were established in central Florida during the early seventeenth century, but were soon abandoned (Deagan 1978; Milanich 1995). A line of missions was established linking St. Augustine on the east coast to Apalachee province in the panhandle. However, this focus on the northern and coastal regions meant little Spanish activity in the early period in present-day Osceola County (Wickman 1999).

Historic Overview 10

By the 1690s, the Spanish actively sought to set up missions among the Jororo Indians, who the Spanish combined in their writings with the Mayaca as both spoke a similar language. The Spanish traveled down the St. Johns River into Mayaca territory (Seminole and Lake Counties, and possibly Osceola County) and then further south to the Jororo (Orange and Osceola Counties). This area was so far from established Spanish settlements that the Spaniards called the Mayaca and Jororo region *la rinconada*, meaning "a corner or nook, a place away from major activities" (Milanich 1995:63-64). Spanish showed little interest in the area until the late 1600s, particularly after the decline of native populations in other parts of the territory.

British Colonial Period, 1763–1784

The English, who had settled in Charleston, South Carolina, began pushing for more territory and influenced the natives to overthrow the Spanish in Florida (Tebeau 1971). In response, the Spanish began building a stone fort in St. Augustine, forcing Apalachee Indians to provide labor for its construction (Paisley 1989). During the ever-shifting alliances between Native American groups and various colonial groups, the Spanish began courting Creeks to settle in the oncethriving Apalachee region. Many accepted the invitation after the British defeated the Creeks in the Yamassee War of 1715 (Paisley 1989). Like the Spanish, the British focused on the coastal settlements and northern peninsular region of the territory, while Spanish missions still worked to convert natives in central Florida.

The Spanish mission system caused a drastic decline in the Native American populations in Florida. Their numbers dropped significantly due to war and disease, and this allowed the Creeks from Georgia and the Carolinas to migrate into the area. In 1765, these migrating Indians were referred to with the Spanish term *cimarrón*, meaning "wild" or "runaway," in the field notes accompanying de Brahm's 1765 map of Florida. The *cimarrón* Indians moved into wild, unsettled territories (Fairbanks 1975). The name "Seminole" is thought to have derived from this reference (Fernald and Purdum 1992).

The British continued to vie for Florida, but not until the Seven Years' War with Spain and England on opposing sides did the British realize their dream. At the end of the war in 1763, the British traded their recent conquest of Havana to Spain for the Florida peninsula. The new acquisition was divided along the Apalachicola River into East and West Florida. Present-day Orange County was part of British East Florida, whose capital was at St. Augustine. Britain took possession of Florida in July 1763 and held control until 1783 (Wright 1975).

Instead of the mission system of the Spanish, the British set up several trading posts in Florida. During this time, runaway black slaves from the Carolina colonies fled to Florida and sought refuge near St. Augustine, where they were to become farmers and occasionally soldiers, or in the Indian settlements in the interior of the colony. Native Americans, especially Seminoles, helped the runaways form their own settlements and often prevented slave-catchers from recapturing them (Fairbanks 1975).

Second Spanish Period, 1784–1821

The American colonies declared their independence from British rule in 1776. Georgia and South Carolina required their citizens to take a strict oath of loyalty to the cause of the American colonies, thus forcing many British loyalists to seek shelter in British Florida (Wright 1975). In 1783, the Treaty of Paris ended the American Revolution and returned Florida to Spain. In the early decades of the nineteenth century, the United States was increasing pressure on Spain to surrender its claim to Florida. Rising conflict often involved the British, Native Americans of the region, as well as runaway slaves who had found refuge in Florida. Andrew Jackson's invasion of Florida in 1818 highlighted Spain's weak control over the region and led to the transfer of the territory to the United States several years later. During the First Seminole War, Jackson marched into Pensacola and across the Florida panhandle. Though the move was criticized by many, it led to Spain's cession of Florida to the United States in 1821. Jackson's move also drove the Seminole deeper into the interior of Florida, including places like Osceola County (Coker and Parker 1996).

American Territorial Period, 1821–1845

Orange County was created in 1824 as the eleventh county in a massive reorganizing of the Florida territory. Orange County, initially known as Mosquito County, was created from St. Johns County and covered a broad territory, including parts of present-day Osceola, Brevard, Flagler, Indian River, Lake, Marion, Martin, Palm Beach, Seminole, and Volusia Counties (Drayton 1827; Porter et al. 2009). Much of what is now Osceola County lay within the boundaries of the Seminole Reservation that the United States had established by the Treaty of Moultrie Creek in 1823. The treaty restricted the Seminoles to 4 million acres of land in the center of the state (Mahon 1985). The treaty was unpopular with the Seminole because they believed the land was not suited for cultivation. Subsequent treaties were equally unpopular. This dissatisfaction led to the Second Seminole War (1835–1842). During this conflict, several forts were established in the region, including Fort Gatlin near present-day Orlando, Fort Maitland near Lake Apopka, and Fort Christmas and Fort Lane near the settlement of Bithlo (Mahon 1985; Roberts 1988).

Following the Second Seminole War, the US government attempted to encourage settlement by passing the Armed Occupation Act in 1842. The act made available for homesteading 200,000 acres of land that was once the Seminole Reservation. Homesteads of 160 acres were awarded to any head of a family or single man, 18 years of age or older, who would agree to cultivate at least 5 acres, build a dwelling, and defend the land for five years. The Homestead Acts of 1866 and 1876 provided further incentives to settlers (Tebeau 1971). A cattleman from Georgia named Aaron Jernigan was among the early pioneers who ventured into present-day central Florida. Well-versed in fighting territorial battles with Native Americans from his time in Georgia, Jernigan set out to conquer this new land in Florida. He first traveled to Tallahassee and then moved to the central portion of the state where he built a stockade near Lake Holden and a small settlement emerged around it. The settlement was known as Jernigan and later became present-day Orlando (Bacon 1975).

Historic Overview 12

Early Statehood and Civil War, 1845-1865

Florida gained admission to the Union as the twenty-seventh state in March 1845 (Schafer 1996). Soon after, Mosquito County was renamed Orange County by an act of the new legislature. In 1856, the county seat was moved from the Village of Enterprise to Orlando. The population in the county was miniscule at the time of statehood; however, it would continue to increase during the next few decades, reaching nearly 1,000 by the start of the Civil War. The population of Orange County, inclusive of present-day Osceola, remained sparse, and conditions were frontier-like for decades to come. County infrastructure was so poor that, until 1872, convicted criminals had to be jailed in Ocala (Marion County) because Orange County had no such facility. The dominant economic activity of the area remained cattle ranching until after the Civil War (Blackman 1927). Perhaps the first settler in the vicinity of present-day Kissimmee, Jimmie Yates, arrived in the 1850s (Crow 1987:24).

Florida seceded from the United States and joined the Confederacy in January 1861. Most of Florida's involvement in the Civil War (1861–1865) was relegated to the coastal regions, where Union forces raided and occupied Florida coastal communities at will. Though Orange County did send men to join the Confederate Army as soldiers, no major battles were fought in and around this central county of the state (Bacon 1975).

Late Nineteenth, 1865-1900

The latter half of the nineteenth century brought significant changes to Orange County, including the creation of a new county, Osceola County, from its land area. Following the Civil War, the State of Florida was tremendously indebted. Immigration and capital investment were therefore minimal. However, more settlers in today's Osceola County did begin to trickle into the area during the postwar years. The Partin family, namely patriarchs Bob and Steve Partin, came from Georgia and bought land in the Kissimmee-St. Cloud area in 1875. Steve Partin settled this land, planting a grove and bringing cattle to raise, as it was already an important piece of the local economy. Bob Partin, who then served as a tax accessor for Orange County, came down with his family and cattle in 1883 (Crow 1987:24, 118). Still, settlement in the area was relegated to a handful of pioneering families.

A breakthrough came in 1881, and the former trading post of Kissimmee, later the seat of Osceola County, arose as a regional center for commerce and transportation. In that year, Hamilton Disston, a wealthy Philadelphia industrialist, purchased 4 million acres of Florida land for \$1 million. He planned extensive drainage projects that reached southward into the Everglades. Disston established his headquarters, dubbed Kissimmee City, on the northern shore of Lake Tohopekaliga, one of the region's largest lakes that connected with the Kissimmee River (Grunwald 2006:81-88). Disston's goal was to dredge the Kissimmee River southward to the Lake Okeechobee region. A simultaneous dredging project would push up the Caloosahatchee River out of Fort Myers in southwest Florida and unite with Lake Okeechobee. In doing so, lands adjacent to the rivers would be drained for agricultural development and a continuous waterway from Kissimmee to Fort Myers and, ultimately, the Gulf of Mexico would

be achieved (Dovell 1952:598, 610, 613; Gannon 1993:65; Reeves 1989:92). Suddenly, the once-quiet cattle country was busy with new activity. By 1883, four steamships operated out of Kissimmee City, which was linked with Lake Okeechobee, Fort Myers, and the Gulf of Mexico via Disston's canals (Dovell 1952:598, 610, 613; Gannon 1993:65; Reeves 1989:92).

Once these lands were drained, Disston began work on various agricultural ventures in this same area. The main focus was on sugar cultivation and milling; in 1885, Disston bought a half-interest in an existing sugar plantation on East Lake Tohopekaliga, investing to expand the acreage of sugar cane from 20 to 1,800 and build a massive sugar mill, said to have been the largest in the country when it was first established (Crow 1987:25; Robinson and Fisk 2002). The St. Cloud Sugar Plantation, reorganized as the Florida Sugar Manufacturing Company, tripled its acreage by 1890 and was valued at \$1 million. Disston also experimented with rice cultivation on the newly drained lands, though it was much less successful and, therefore, a short-lived venture (Crow 1987:25; Knetsch 2018:12).

Disston's sugar plantation also was instrumental in bringing rail service to Kissimmee and St. Cloud, allowing the settlements to blossom (Dovell 1952:598, 610, 613; Gannon 1993:65; Reeves 1989:92). The South Florida Railroad reached Kissimmee in the 1880s. Henry B. Plant, a wealthy entrepreneur who, like Disston, had grand plans for Florida, spearheaded the development of the railroad. Plant sought to unite Sanford (Seminole County) with Tampa and numerous points in between, including the rising town of Kissimmee. Working from both ends of the line with two crews of more than 1,000 men each, Plant completed the railroad in a little over seven months. The line was completed in 1884. All along the lines, new towns were born (Brown 1991:16-17; Dovell 1952:615; Johnson 1966:123-131). A spur from Kissimmee to St. Cloud (and then around East Lake Tohopekaliga to Narcoossee) was built between 1886 and 1889, named the Sugar Belt Railway (Osceola County Historical Society 2017). The railroads focused most of the area's growth to the Lake Tohopekaliga area, leaving thinly settled the areas not touched by the railroad (Norton 1892:73).

The success of railroad and drainage projects raised the status and prosperity of Kissimmee and the surrounding areas, influencing a call among the population to break from Orange County. Brevard County also contributed lands to the formation of the new county. The State Legislature passed the act creating the Osceola County in 1887 (Morris 1995:185-186; Reeves 1989:92). Kissimmee was selected as the county seat. Osceola County was 850,942 acres (The Record Company 1935). Bob Partin served as its first tax accessor (Crow 1987:118).

Though he helped create massive growth in the area, Disston's sugar venture was destroyed by the Panic of 1893 and other financial crises during this era. Disston died in 1896, and the sugar mill was dismantled—shipped out of the area by the railroad spur built to connect it with the markets—by 1901 (Osceola County Historical Society 2017; Robinson and Fisk 2002).

Early Twentieth Century, 1900-1945

Osceola was a vast cattle country where, for many decades, cattlemen had ranged their herds on the open range. Fences to confine cattle to certain tracts of land became more common in

Historic Overview 14

the early twentieth century. The cattle fever tick was one reason that fences became more common. In the 1910s and 1920s, federal, state, and local officials in Osceola County and across the state were engaged in a full-fledged war against the fever tick, a cattle parasite that negatively impacted the quality of Florida beef cattle. Dipping vats were constructed from the piney woods of the panhandle to the prairies of southern Florida. The traditional method of turning cattle out to the scrub until round-up time in the spring was gradually abandoned as cattlemen were required to keep closer tabs on their cattle to ensure that they were dipped every two weeks. Like their counterparts in other states, cattle owners were faced with new expenses that arose from the need for materials, fencing, and labor to comply with the eradication program. The state paid three cents per cow that was dipped, but many small-time cattlemen were unable to meet the rising operational costs and were forced to withdraw from the business altogether (Akerman 1976:237-242).

Some cattlemen in Osceola County began to purchase land in this period. The Kissimmee Cattle Company reportedly held 520,000 acres in Osceola County and the neighboring counties of De Soto and Okeechobee in the 1910s. Twenty-five thousand head of cattle populated this range (*Christian Science Monitor* 26 March 1918). The cattle industry ultimately was successful against the cattle tick by the 1930s, although outbreaks were not unknown in later decades. The thriving industry supported Osceola County through the 1930s and 1940s. A large stockyard in Kissimmee in this period that shipped out some 6,000 cattle each year signified the importance of the industry (Florida Department of Agriculture 1927:49-50). The Partin family, particularly Henry O. Partin, is often credit with bringing Brahman cattle into the state, after buying more than 100 of them in 1936 (Partin & Partin Heart Bar Ranch n.d.; Stiteler 1986).

In the 1930s, cattle, timber, and naval stores were the most important industries in Osceola County, while other types of agriculture were beginning to spread. Timber interests were taking advantage of the county's large stands of virgin yellow pine. The timber was processed into crates and other products at several mills throughout the county. The naval stores industry also relied on the County's abundant pine. Aside from cattle, agriculture was not extensive, although truck farms, citrus, poultry, and other livestock were increasing in importance (The Record Company 1935).

At the start of World War II in 1941, the population of Osceola County was slightly more than 10,000. The main highways of the county were paved, but the majority of roads were unpaved (The Record Company 1935). World War II (1941–1945) left a noticeable mark on Osceola County. Many local men and women served between 1941 and 1945. Kissimmee Army Air Field opened in Kissimmee in 1943 to serve as a training base for pilots. Located to the west of town, the airfield was the site of much activity during the war years. An officer's club, a chapel-theater, a pool, a golf course, barracks, a USO club, and other facilities were established here. Nearly 2,000 men trained at the air field, and some of them married local women and remained in the community for years to come. German and Italian prisoners, held at Orlando, were brought to the base to perform landscaping. In 1945, the Kissimmee Army Air Field, which had been elevated to base status, was deactivated (Osceola County Centennial Book Committee 1987:71-73).

Post-War and Beyond, 1945-Present

The most significant change in the history of Osceola County since World War II has been population growth and development. In the 20 years after the war, the county seat of Kissimmee was still described as the cow capital of the State of Florida. In 1960, there were only 19,000 residents in the county. The development of Walt Disney World, the entrance for which was 10 miles (16.1 kilometers) away from Kissimmee, was completed in 1971. A service economy quickly arose in Kissimmee and the surrounding area to serve the crowds of tourists who visited the theme park. Motels, hotels, fast food establishments, and new roads appeared, bringing new jobs and businesses to the county. Occupations changed to the point that only a few hundred residents were involved in agriculture in recent years (Mormino 2005). Coupled with the construction of Interstate 4 (I-4), I-75, and Florida's Turnpike, Osceola County has experienced extensive growth and development in recent decades (Reeves 1989:93).

BACKGROUND RESEARCH

FLORIDA MASTER SITE FILE REVIEW

Florida Master Site File (FMSF) data from April 2019 were reviewed to identify any previously recorded cultural resources within the project APE. The FMSF review indicates that eight previous cultural resource surveys intersect the Neptune Road APE (**Table 2**; **Figure 4**).

Table 2. Previous Cultural Resource Assessment Surveys that Intersect the Neptune Road APE.

FMSF No.	Title	Year	Reference
89	An Archaeological and Historical Survey of the 201 Facilities Plan Project, Kissimmee, St. Cloud, Osceola County	1977	Archaeological Consultants, Inc.
4383	Phase I Cultural Resources Investigation of the Proposed 30 IN O.D. Mainline Loop South Portion in the Florida Gas Transmission Company Phase III Expansion Project [Draft Report]	1993	R. Christopher Goodwin and Associates, Inc.
7076	An Archaeological and Historical Survey of the Neptune Pointe Project Area in Osceola County, Florida	2002	Panamerican Consultants, Inc.
9230	Cultural Resource Assessment Survey of Florida's Turnpike Mainline PD&E Study From US 192 to SR 50 (Clermont), Orange and Osceola Counties		Janus Corp.
11039	Cultural Resources Survey Butler Ridge-Partin #2, Osceola County, Florida		South Arc, Inc.
11041	Cultural Resources Survey Partin Estate, Osceola County, Florida	2004	South Arc, Inc.
14265	A Phase I Cultural Resource Assessment Survey of Twenty-Four Proposed Pond Locations Along State Road 500 (US 192/US 441) Between Aeronautical Lane and Nova Road, Osceola County, Florida	2007	SEARCH
20800	Cultural Resource Assessment Survey along State Road 500 from Aeronautical Drive to Budinger Road and from Eastern Avenue to Nova Road, Osceola County, Florida	2014	SEARCH

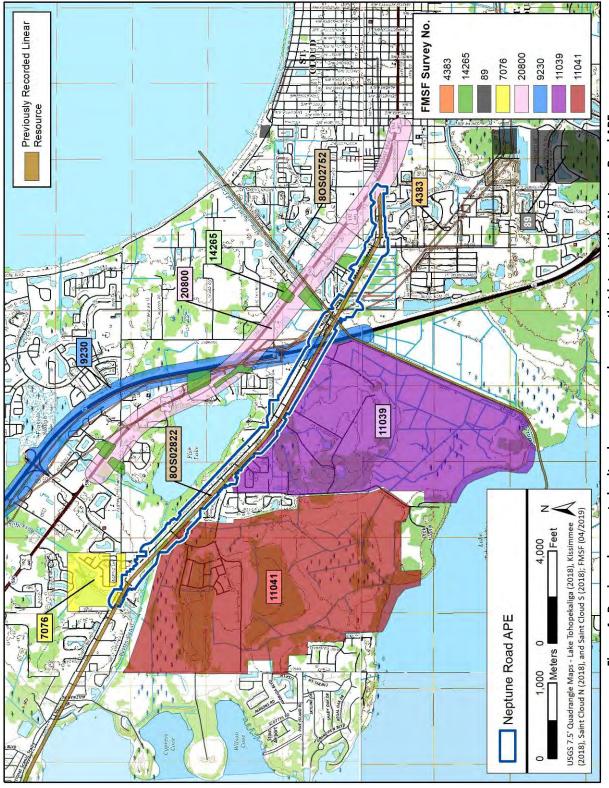


Figure 4. Previous documented cultural resources and surveys that intersect the Neptune Road APE.

Final Report

FMSF Survey No. 89 investigated the Martin Street facilities plant site, including force main pipelines that run along Neptune Road to State Road (SR) 525. FMSF Survey No. 4383 was a pipeline survey that intersects the Neptune Road APE at four locations along the project corridor between Commerce Center Drive and Florida's Turnpike. FMSF Survey No. 7076 was conducted in support of the Neptune Pointe housing development at the northwestern end of the current APE. FMSF Survey No. 9230 investigated a pipeline route along Florida's Turnpike between US 192 and SR 50. FMSF Survey Nos. 11039 and 11041 were conducted on the south side of Neptune Road between Florida's Turnpike and Florida Trail. FMSF Survey No. 14265 investigated 24 proposed pond locations along SR 500, one of which intersects the Neptune Road APE on the north side of the road between SR 525 and Commerce Center Drive. Finally, FMSF Survey No. 20800 included a segment of SR 500 and intersects the Neptune Road APE at the eastern end. As a result of these surveys, no cultural resources were identified within the Neptune Road APE.

The review of the FMSF identified that there are no previously recorded archaeological sites within the Neptune Road APE (see Figure 4). Increasing the search to include cultural resources within 1.0 mile (1.6 kilometers) of the Neptune Road APE found three previously documented archaeological sites (Table 3), all of which have been evaluated as ineligible for inclusion on the NRHP by the State Historic Preservation Office (SHPO). The FMSF review also indicates that two historic linear resources have been recorded within the project APE (see Table 3; see Figure 4).

Table 3. Previously Recorded Cultural Resources within the Neptune Road APE.

Archaeological Sites							
Site No.	Name	Time Period		Survey Evaluation		SHPO Evaluation	
8OS02390	Willet Up a Tree	Archaic, 8500 BC to 1,000 BC		Ineligible for NRHP		Ineligible for NRHP	
8OS01844	Kamikaze Kow	Twentieth-century American, 1900-present; Late Archaic; Orange; St. Johns IIa		Ineligible for NRHP		Ineligible for NRHP	
8OS01771	US 192-1	Prehistoric			Ineligible fo	or NRHP	Ineligible for NRHP
Resource Groups							
Site No.	Name		Built	Resource Type		Recommended NRHP Status	
8OS02752	St. Cloud Canal	1880s Linear		Eligible for		r NRHP	
8OS02822	St. Cloud and Suga	ar Belt Railway 1888 Linear		Linear	Ineligible for		e for NRHP

The two linear resources are the St. Cloud Canal (8OS02752) and the St. Cloud and Sugar Belt Railway (80S02822). The St. Cloud Canal (80S02752) was constructed in the early 1880s by Hamilton Disston to connect Lake Tohopekaliga and East Lake Tohopekaliga and facilitate the movement of agricultural products from Kissimmee to the Gulf of Mexico. The canal is under the jurisdiction of SFWMD and intersects the project corridor 393.7 feet (120 meters) west of Betsy Ross Lane. The St. Cloud Canal (80S02752) has not been altered and has been deemed eligible for listing in the NRHP (SEARCH 2014). The St. Cloud and Sugar Belt Railway (8OS02822) was constructed in 1888 from Kissimmee to Narcoossee. Built by Hamilton Disston, the railway transported sugar and citrus. The St. Cloud and Sugar Belt Railway (80S02822) runs parallel along Neptune Road throughout the entire APE. Due to alterations made to the resource over the years, 8OS02822 was determined ineligible for inclusion in the NRHP by SHPO on September 4, 2015.

HISTORIC MAP AND AERIAL PHOTOGRAPH REVIEW

Historic maps and aerial photographs were examined in order to identify past land use in the vicinity of the Neptune Road APE. The earliest detailed maps consulted were General Land Office (GLO) survey maps. The GLO maps were created by government land surveyors during the nineteenth century as part of the surveying, platting, and sale of public lands. These maps characteristically show landscape features such as vegetation, bodies of water, roads, and other features. The level of detail in GLO maps varies, with some also depicting structures, Native American villages, railroads, and agricultural fields. GLO maps of Florida Township 25 South, Ranges 29 and 30 East and Township 26 South, Ranges 29 and 30 East created in the 1840s show potential signs of settlement in the project area (Figure 5) (GLO 1844, 1848, 1849a, 1849b). Much of the APE is covered by marshland, though several dotted lines do cross through its boundaries; this occurs in the northwestern, central, and southeastern sections of the project area. While some of these appear to serve as the outlines of the marshlands, they resemble lines used to designate roads on GLO maps. The lines in the southeastern portion of the APE most clearly appears to be early roadways. No other features are apparent.

By the late nineteenth century, both Kissimmee and St. Cloud were established settlements, as evidenced by an 1890 map noting their locations (Norton 1890). This map also provides several additional details about this area, namely that a railroad line had been built to connect Kissimmee with St. Cloud (continuing on to New Arcadia and Narcoossee), and a new canal connected the two Tohopekaliga lakes. These features would have passed near and likely though the APE, while the railroad travels a similar route as today's Neptune Road.

In fact, on the 1917 Florida State Road Department (FSRD) map, a roadway is illustrated following the same path as the rail line (FSRD 1917). This map also shows the above-mentioned canal. By 1926, the roadway is labeled SR 24 (FSRD 1926). The 1939 highway map also designates this highway as part of US 192; however, it appears to follow a route that more closely coordinates with today's Neptune Road than present-day US 192 (FSRD 1939). These figures are not included in this report.

Aerial photographs from 1944 do show that a road following the route of today's US 192 had been constructed, passing through the far southeastern portion of the APE and mostly paralleling Neptune Road to the northeast (**Figure 6**) (USDA 1944). Present-day Neptune Road is evident crossing through and following the route of the project area. Additionally, the canal seen in previous maps is apparent passing northeast to southwest through the southeastern section of the APE. Little development is readily evident within the project area, though several groves and other agricultural fields are apparent in various areas, most notably in the northwestern and southeastern portions. A different canal also is evident in the far northwestern section of the APE.

This new canal is named the Partin Canal on a 1954 topographic map (**Figure 7**) (US Geological Survey [USGS] 1954a, 1954b). This map also indicates a levee associated with this canal along

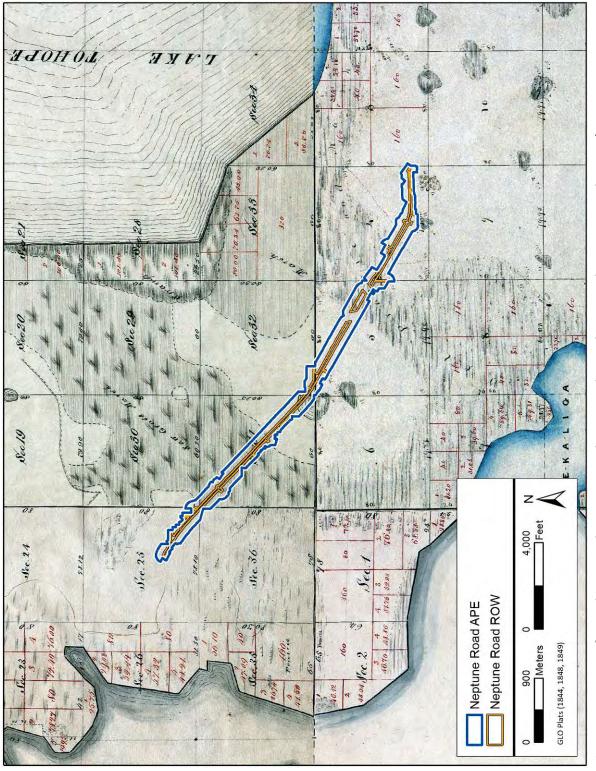


Figure 5. GLO maps of Township 25 South, Ranges 29 and 30 East and Township 26 South, Ranges 29 and 30 East (GLO 1844, 1848, 1849a, 1849b).

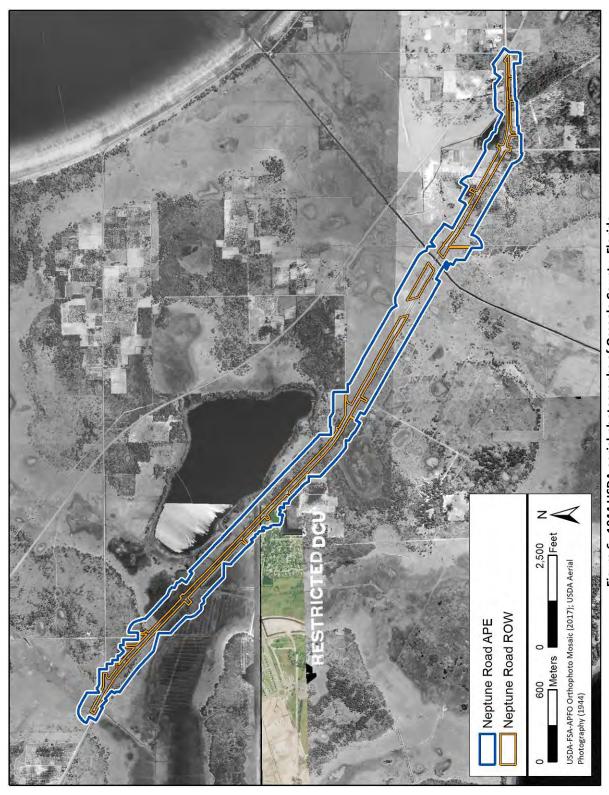
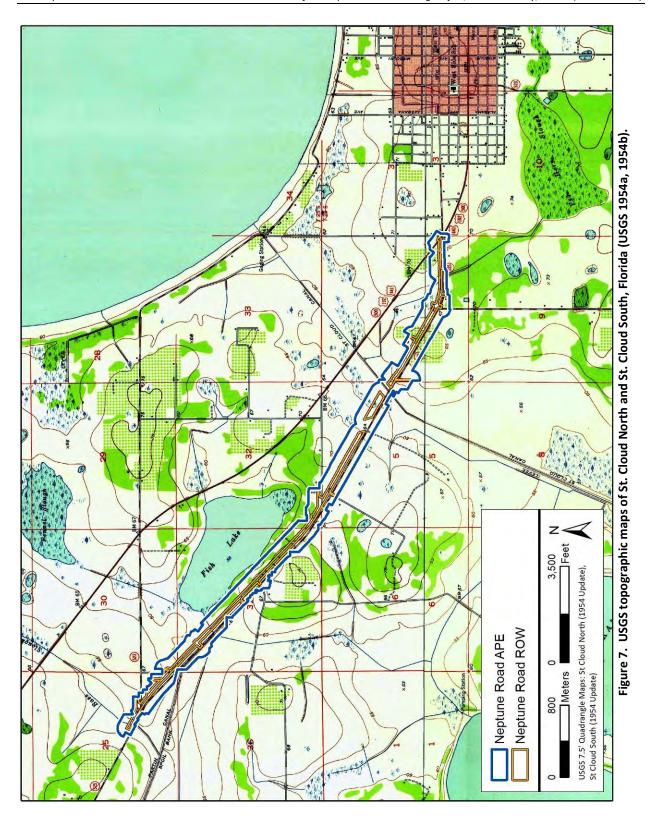


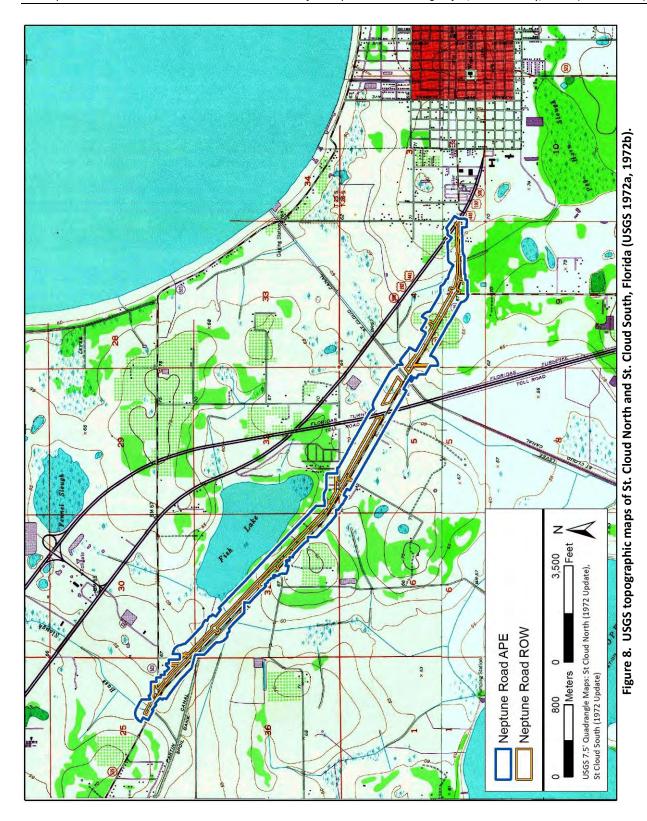
Figure 6. 1944 USDA aerial photographs of Osceola County, Florida.



22

the southwest side of SR 525/Neptune Road within the APE. On the southwest side of Fish Lake, around 13 structures were situated between the highway and the lake within the project area; another four structures that are obstructed by the APE line may fall within the boundaries as well. The nineteenth-century canal that passes through the project area is illustrated crossing through in the same manner as before and is labeled as the St. Cloud Canal. Two groves also are shown in the southeastern section of the APE. At least three structures are located inside the project boundaries in this area, with another two or three possibly obscured by the APE line. US 192/US 441/SR 500 is illustrated crossing through the southeastern extent of the project area.

Though few changes are evident on 1972 updates to these topographic maps, some new features are illustrated inside the APE (**Figure 8**) (USGS 1972a, 1972b). The most notable change is the addition of Florida's Turnpike, which passes through the central portion of the APE from north to south. As many as six new structures may fall inside the northwestern project boundaries at the intersection of SR 525/Neptune Road and SR 523. Around seven new structures also are indicated near Fish Lake, though it is unclear if these fall inside the project area. Lastly, US 192 is shown as a divided highway, though it crosses through the southeastern portion of the APE in a similar manner as noted above.



24

RESEARCH DESIGN

PROJECT GOALS

A research design is a plan to coordinate the cultural resource investigation from inception to the completion of the project. This plan should minimally account for three things: (1) it should make explicit the goals and intentions of the research, (2) it should define the sequence of events to be undertaken in pursuit of the research goals, and (3) it should provide a basis for evaluating the findings and conclusions drawn from the investigation.

The goal of this CRAS was to locate and document evidence of historic or prehistoric occupation or use within the APE (archaeological or historic sites, historic structures, or archaeological occurrences [isolated artifact finds]), and to evaluate these for their potential eligibility for listing in the NRHP. The research strategy was composed of background investigation, a historical document search, and field survey. The background investigation involved a perusal of relevant archaeological literature, producing a summary of previous archaeological work undertaken near the project area. The FMSF was checked for previously recorded sites within the project corridor, which provided an indication of prehistoric settlement and land-use patterns for the region. Current soil surveys, vegetation maps, and relevant literature were consulted to provide a description of the physiographic and geological region of which the project area is a part. These data were used in combination to develop expectations regarding the types of archaeological sites that may be present and their likely locations (site probability areas).

The historical document search involved a review of primary and secondary historic sources as well as a review of the FMSF for any previously recorded historic structures. The original township plat maps, early aerial photographs, and other relevant sources were checked for information pertaining to the existence of historic structures, sites of historic events, and historically occupied or noted aboriginal settlements within the project limits.

NRHP CRITERIA

Cultural resources identified within the project APE were evaluated according to the criteria for listing in the NRHP. As defined by the National Park Service (NPS), the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events or activities that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or

- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

NRHP-eligible districts must possess a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. NRHP-eligible districts and buildings must also possess historic significance, historic integrity, and historical context.

CULTURAL RESOURCE POTENTIAL

Based on an examination of environmental variables (soil drainage, access to freshwater resources, relative elevation), and considering the results of previous cultural resource assessment surveys in the area, the Neptune Road APE was considered to have a low probability for encountering intact prehistoric cultural resources. Although a sizable portion of the surrounding area has been subjected to archaeological examination, very few cultural resources have been documented, likely because prior to the construction of the St. Cloud Canal (80S02752) in the early 1880s, much of the surrounding land would have been inundated.

The APE was judged to have a high potential for unrecorded historic resources. The Osceola County Property Appraiser's database indicates 21 parcels with potentially historic structures are located within or intersect with the current APE, including two potential resource groups (a mobile home park and multiple structures on a church property). In contrast, the potential for historic-age archaeological deposits was considered low within the Neptune Road APE due to previous road construction/maintenance and the installation of buried utilities.

SURVEY METHODS

Archaeological Field Methods

The Phase I field survey consisted of systematic subsurface shovel testing according to the potential for buried archaeological sites. Additionally, a pedestrian inspection of the ground surface was conducted to locate surface artifacts or cultural features, such as structural remains. Positive shovel tests triggered archaeological site delineation with excavation at reduced intervals (12.5 meters [41 feet]). Shovel testing continued until two negative tests were excavated in the cardinal directions within the project limits. Marked field maps are provided in **Appendix B**.

Research Design 26

Shovel tests measured approximately 50 centimeters (19.7 inches) in diameter and were excavated to a minimum depth of 100 centimeters below surface (cmbs) (39.4 inches), subsurface conditions permitting. All excavated sediments were screened through 1/4-inch mesh hardware cloth. The location of each shovel test was marked on aerial photographs and recorded on Wide Area Augmentation System (WAAS) -enabled handheld Global Positioning System (GPS) units. The cultural content, soil strata, and environmental setting of each shovel test were recorded in field notebooks.

Architectural Field Methods

The architectural survey for the project utilized standard procedures for the location, investigation, and recordation of historic properties. In addition to a search of the FMSF for previously recorded historic properties within the project area, SEARCH reviewed USGS quadrangle maps for structures that were constructed prior to 1975. The SEARCH field survey inventoried existing buildings, structures, and other aspects of the built environment within the Neptune Road APE. SEARCH recorded the location of each historic resource with a WAAS-enabled GPS unit and plotted it on USGS quadrangle maps and project aerials. SEARCH photographed all identified historic resources with a digital camera and recorded architectural style, distinguishing characteristics, and present condition on FMSF resource forms. Upon completion of fieldwork, forms and photographs were returned to the SEARCH offices for analysis. SEARCH considered dates of construction, design, architectural features, condition, and integrity, as well as how the resources relate to surrounding landscapes. SEARCH evaluated the resources to assess their significance and recommended them eligible, potentially eligible, or not eligible for NRHP listing.

Laboratory Methods

Artifacts were brought to SEARCH's laboratory facility in Newberry, Florida, where they were washed, sorted, analyzed, and classified according to a coding system loosely based on South's method of artifact classification (South 1977). This information was recorded in a Microsoft Access database under the supervision of the Lab Director. The artifacts were given code numbers, which allow for systematic, comparable data entry. Prehistoric lithic artifacts were analyzed by source material, method of manufacture, and artifact function. Prehistoric ceramics were analyzed by temper, surface decoration, and vessel morphology. Historic artifacts were analyzed by use, material type, and function. Materials were then rebagged and organized by provenience and artifact class. Field Specimen (FS) catalog numbers were assigned in the lab, and the FS Log is provided in **Appendix C**.

Curation

The original maps and field notes are presently housed at the Newberry, Florida, SEARCH office. The original maps and field notes will be turned over to the Osceola County Department of Transportation and Transit upon project completion; copies will be retained by SEARCH.

Certified Local Government Consultation

On August 5, 2019, SEARCH archaeologist Matt Nowak emailed Trevor Bedford, the Certified Local Government (CLG) representative for the City of St. Cloud, to inquire about concerns the CLG may have regarding the Neptune Road APE. In the email, Mr. Nowak provided Mr. Bedford with the project maps. On October 1, 2019, SEARCH Principal Investigator for the project, Steve RabbySmith, sent a follow-up email to Mr. Bedford describing the results of the project. As of the completion of this report, Mr. Bedford has not responded.

Procedures to Deal with Unexpected Discoveries

Every reasonable effort has been made during this investigation to identify and evaluate possible locations of prehistoric and historic archaeological sites; however, the possibility exists that evidence of cultural resources may yet be encountered within the project limits. Should evidence of unrecorded cultural resources be discovered during construction activities, all work in that portion of the project area must stop. Evidence of cultural resources includes aboriginal or historic pottery, prehistoric stone tools, bone or shell tools, historic trash pits, and historic building foundations. Should questionable materials be uncovered during the excavation of the project area, representatives of the Osceola County Department of Transportation and Transit will assist in the identification and preliminary assessment of the materials. If such evidence is found, the FDHR will be notified within two working days. In the unlikely event that human skeletal remains or associated burial artifacts are uncovered within the project area, all work in that area must stop. The Osceola County Board of Commissioners must be contacted. The discovery must be reported to local law enforcement, who will in turn contact the medical examiner. The medical examiner will determine whether or not the State Archaeologist should be contacted per the requirements of Chapter 872.05, Florida Statutes.

RESULTS

ARCHAEOLOGICAL RESOURCES

The Neptune Road archaeological APE included existing and proposed right-of-way along both sides of Neptune Road from Partin Settlement Road to US 192 (**Figure 9**). The existing right-of-way is approximately 40 meters (131.2 feet) wide throughout the project corridor. The environment around the project area is characterized by residential development, maintained agricultural fields, urban landscaping, canals, drainage ditches, and underground utilities.

The archaeological field survey consisted of pedestrian survey, surface inspection, and subsurface testing. Due to the presence of buried utilities, drainage features, and inundated soils, subsurface testing was limited within the current APE. A total of 39 shovel tests were excavated along Neptune Road at 12.5- to 100-meter (41- to 328-foot) intervals based on the varying probability for archaeological deposits (**Figures 10-15**). An additional 22 "no-dig" points



Figure 9. Representative photographs of the Neptune Road APE. Top left: View east along Neptune Road in the eastern end of the project corridor. Note the level of development and presence of buried utilities in the APE. Top right: View east near the middle of the Neptune Road APE. Note the presence of a graded right-of-way with gas and water flags identifying buried utilities. Center left: View west near the center of the Neptune Road APE depicted the road crossing over the Florida Turnpike. Center right: View east along Neptune Road in the western end of the project corridor. Note the level of development and presence of buried utilities in the APE. Bottom left: Excavated shovel test near the middle of the Neptune Road APE depicting a stratified silty sand. Bottom right: Excavated shovel test from the eastern portion of the APE. Note the level of disturbance likely associated with road construction.



Figure 10. Results of archaeological testing in the Neptune Road archaeological APE, map 1 of 6.

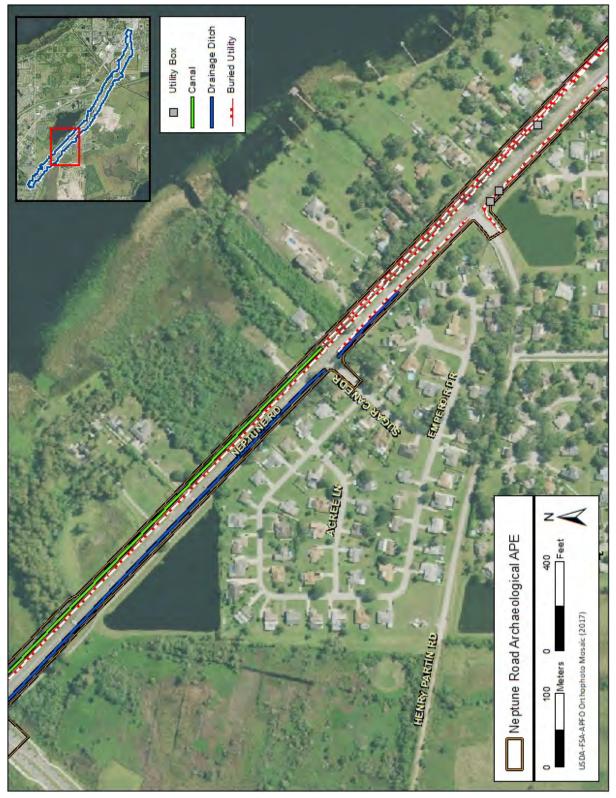


Figure 11. Results of archaeological testing in the Neptune Road archaeological APE, map 2 of 6.

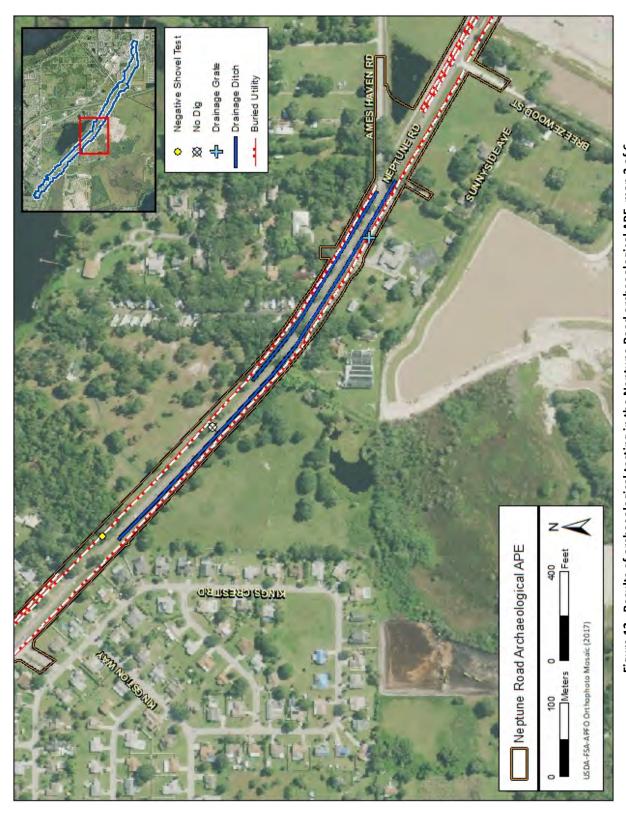


Figure 12. Results of archaeological testing in the Neptune Road archaeological APE, map 3 of 6.

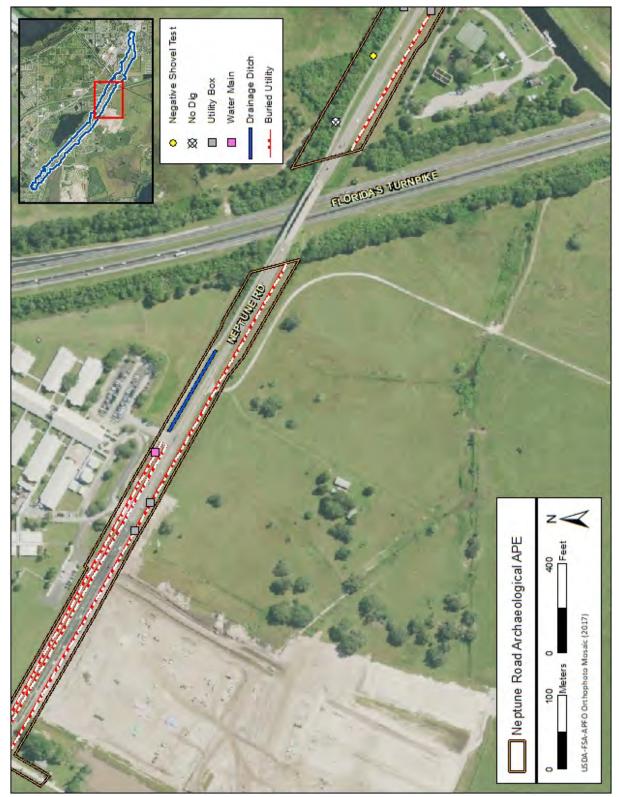


Figure 13. Results of archaeological testing in the Neptune Road archaeological APE, map 4 of 6.

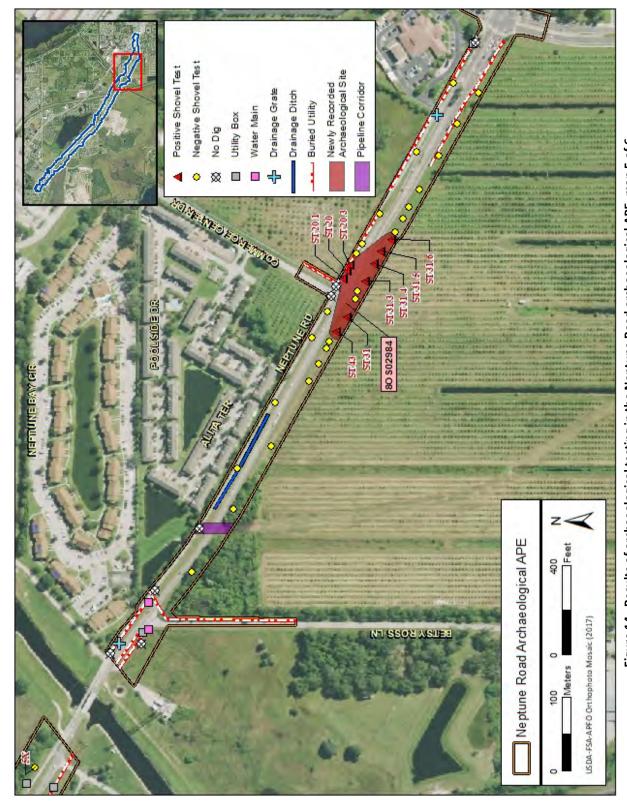


Figure 14. Results of archaeological testing in the Neptune Road archaeological APE, map 5 of 6.

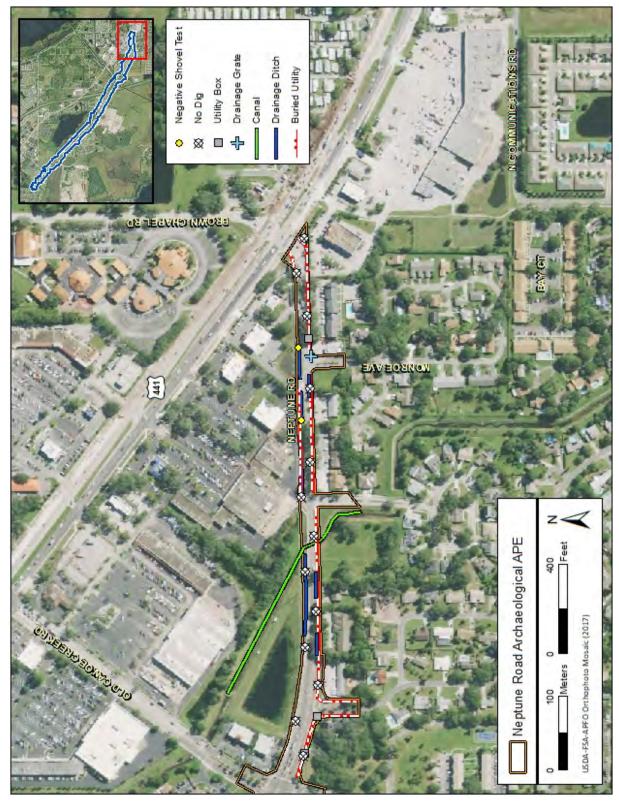


Figure 15. Results of archaeological testing in the Neptune Road archaeological APE, map 6 of

were recorded along Neptune Road where shovel testing was attempted but determined to be infeasible due to buried utilities, drainage features, and inundated or saturated soils. Of the 39 excavated shovel tests, nine were positive for prehistoric and historic archaeological remains.

Soils within the Neptune Road right-of-way exhibited a high degree of variation in color and depth as a result of heavy disturbance in the project corridor. Evidence of significant disturbance included mottled soils in upper strata and modern refuse. Only three shovel tests were excavated in the northwestern two-thirds of the APE. Soils in this portion of the APE typically displayed mottled white (10YR 8/1) and dark grayish-brown (10YR 4/2) sandy silt from 0-15 cmbs (0-5.9 inches) above very dark grayish-brown (10YR 3/2) silty loam from 15-40 cmbs (5.9-15.8 inches) above white (10YR 8/1) compact silty sand from 40-100 cmbs (15.8-39.4 inches) (see **Figure 9**). Soils in the southeastern third of the APE also were disturbed and typically displayed mottled dark gray (10YR 4/1) silty sand from 0-40 cmbs (0-15.8 inches) above gray (10YR 5/1) fine sand from 40-60 cmbs (15.6-23.6 inches) above very dark gray (10YR 3/1) wet silty sand from 60-100 cmbs (23.6-39.4 inches); gravel and asphalt were identified in each stratum (see **Figure 9**).

As a result of the archaeological survey, one new archaeological site (8OS02984) was identified and recorded within the Neptune Road APE. The location of shovel tests, "no-digs," disturbances, and geographic characteristics were marked on field maps and are provided in **Appendix B**. **Appendix C** provides the complete artifact inventory, while FMSF resource forms are included in **Appendix E**. A survey log is included in **Appendix F**.

Newly Recorded Site

80S02984, Poseidon 1

<u>Location</u>: Section 4, Township 26 South, Range 30 East

<u>Setting</u>: Neptune Road right-of-way at the intersection of Neptune Road and Commerce Center Drive (**Figure 16**)

Soils: Wauchula fine sand; poorly drained

<u>Survey Methods</u>: Pedestrian survey and

screened shovel test

<u>Site Type</u>: Low-density prehistoric artifact scatter; moderate-density historic artifact scatter

<u>Site Size</u>: 1.22 acres (4,936 square meters)

Depth of Deposits: 0-100 cmbs

<u>Chronology</u>: St. Johns period (500 BC–AD 1565); nineteenth and twentieth century, historic

<u>Artifacts</u>: Prehistoric materials collected from 8OS02984 include lithic flakes, flake



Figure 16. Overview of 8OS02984, view west.

fragments, and a St. Johns ceramic sherd. Historic artifacts include bottle glass, porcelain, refined earthenware, whiteware, wire nails, barbed wire, and unidentified metal.

<u>Discussion</u>: Resource 8ES02984, the Poseidon 1 site, is a newly recorded archaeological site consisting of a low- to moderate-density surface and subsurface scatter of prehistoric and late nineteenth- to mid-twentieth-century artifacts. The site is located within the Neptune Road right-of-way near the intersection of Neptune Road and Commerce Center Drive and is bisected by Neptune Road. The site rests on a low-lying floodplain that consists of several maintained agricultural fields and canals. The exact northeast and southwest boundary of the site are unknown due to the right-of-way and project boundaries, which restricted further testing. Due to the narrow project corridor, delineating shovel tests were excavated northwest and southeast of the initial positive shovel tests on each side of Neptune Road; shovel testing continued until two consecutive negative shovel tests were achieved (**Figure 17**). In addition to the nine positive shovels tests, 11 negative shovel tests were excavated and two "no-dig" points recorded to document and delineate the site.

Soils within the site boundary were consistent and typically displayed dark grayish-brown (10YR 4/2) silty sand from 0-15 cmbs (0-5.9 inches) (Stratum I) above light gray (10YR 7/1) silty sand from 15-50 cmbs (5.9-19.7 inches) (Stratum II) underlain by pale brown (10YR 6/3) silty sand from 50-100 cmbs (19.7-39.4 inches) (Stratum III) (**Figure 18**). Each positive shovel test within the boundary of 8OS02984 was excavated to 100 cmbs (39.4 inches). Although artifacts were recovered from all three strata, the majority of artifacts were recovered from Strata I and II.

The prehistoric and historic artifacts were found on both sides of Neptune Road with the majority of material coming from the south side. Historic artifacts comprise the vast majority of the collection and include porcelain (n=1), whiteware (n=3), refined earthenware (n=1), modern and historic bottle glass (n=91), unidentified glass (n=1), barbed wire (n=1), wire nails (n=2), and unidentified metal (n=4). Prehistoric artifacts include a Coastal Plain chert flake (n=1), Coastal Plain chert flake fragments (n=2), and St. Johns pottery (n=1). In addition, one (n=1) fish bone was recovered in the same shovel tests as one of the flake fragments. A summary table of all artifacts recovered from 8OSO2984 can be found in **Appendix C**.

Some historic artifacts were observed on the ground surface within the site boundary, but not collected, including machine-made glass bottle fragments and whiteware ceramic fragments. No prehistoric artifacts were identified during the surface inspection.

Interpretation and Evaluation: Resource 8OS02984 is a multi-component prehistoric and historic archaeological site that features a low-density prehistoric artifact scatter and a moderate-density historic artifact scatter. Temporally diagnostic artifacts recovered from 8OS02984 are presented in **Table 4**. Based on the identification of a St. Johns potsherd, the prehistoric cultural component dates between 500 BC and AD 1565. Artifacts from the historic collection that could be tightly dated were limited to two fragments of amethyst bottle glass (1880–1917). The earliest manufacture dates for some of the other historic artifacts

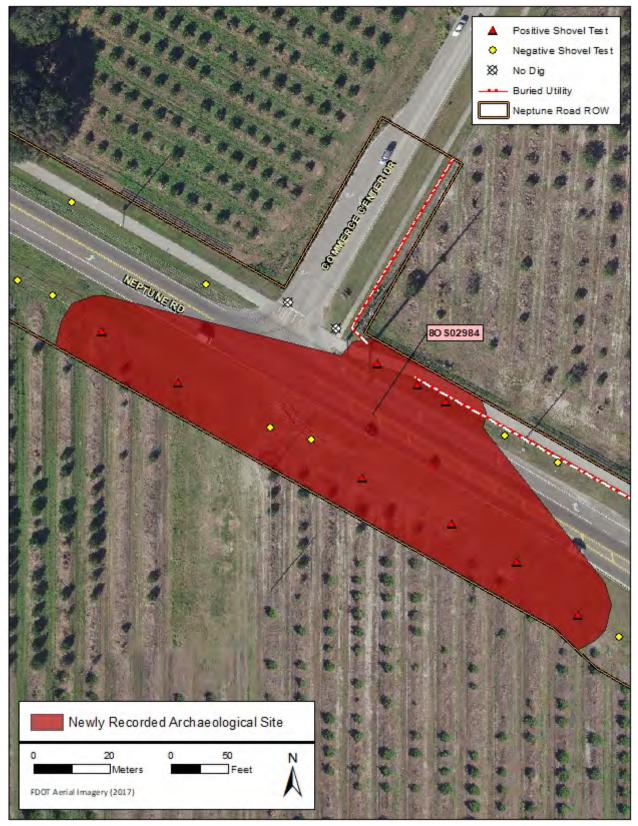


Figure 17. Results of archaeological testing within boundary of 8OS02984.





Figure 18. Left: Representative soil profile from a positive shovel test within the boundary of 8OS02984.

Right: 1944 USDA aerial photograph of Osceola County, Florida. Note the presence of a historic structure just northwest of the location of 8OS02984 (yellow star).

Table 4. Diagnostic Artifacts Recovered from 8OS02984.

Artifact	Date Range	Count	Stratum
Porcelain, decal transfer print	post 1902	1	П
Bottle glass, embossed, amethyst	1880-1917	1	Ш
Wire nail fragment	post 1865	2	П
Whiteware	post 1820	3	П
Bottle glass, amethyst	1880-1917	2	1
Bottle glass w/screw cap, clear	post 1869	2	1
St Johns ceramic	500 BC-AD 1565	1	1

(i.e., whiteware) collected from 8OS02984 date to the early nineteenth century; however, these items were produced over a long period of time and are still being manufactured today. Given the nature of the recovered material, the site's historic component appears to be related to domestic activities. Although there were no structural features noted in the field, consultation of historic maps (i.e., USDA 1944, USGS 1953) indicates that there was at least one historic structure in the immediate vicinity of 8OS02984 (see **Figure 18**) and several other historic structures approximately 0.23 miles (0.37 kilometers) to the southeast. Earlier maps show no development in proximity to the site.

Based on these observations, the historic component of 8OS02984 represents a typical collection of household artifacts and refuse from a late nineteenth to mid-twentieth century home site or farmstead. Sites such as these are common throughout Florida and much of the United States.

Consisting of a small collection of lithic debitage (n=3) one (n=1) St. Johns potsherd, and one (n=1) fish bone, the prehistoric component at 80S02984 represents the highly scattered remains of camp or habitation that was occupied sometime or repeatedly during the Woodland and/or Mississippian periods. These artifacts and remains were recovered from highly disturbed contexts and, like the site's historic component, have likely been subject to high

levels of disturbance associated with the maintenance of the adjacent agricultural land and the construction of Neptune Road. There are several other low-density prehistoric artifact scatters located nearby between Lake Tohopekaliga and East Lake Tohopekaliga, most of which have been determined to be ineligible for listing in the NRHP by the SHPO.

Given the intermixing of modern, historic, and prehistoric material, it is evident that 8OS02984 has been severely disturbed, destroyed, and/or redeposited, probably as a result of agricultural activities and the construction of Neptune Road. This interpretation is supported by documented historic agricultural activity and observed present-day agricultural fields adjacent to the site (see **Figures 17 and 18**) and the similarity of cultural material on both sides of Neptune Road. The lack of intact features or other deposits at 8OS02984 coupled with the high degree of disturbance in the Neptune Road project right-of-way restricts the site's potential to contribute to a greater understanding of the prehistoric and historic use and occupation of the area.

Based on the common nature of the site, the level of disturbance, the lack of intact features, and the ubiquitous and unremarkable nature of the artifact assemblage, 80S02984 does not have the potential to yield additional information important to the history of the region. It is the opinion of SEARCH that 80S02984 is ineligible for inclusion in the NRHP. No further archaeological work is recommended.

ARCHITECTURAL RESOURCES

The architectural survey resulted in the identification and evaluation of 40 historic resources within the Neptune Road APE, including two previously recorded resources and 38 newly recorded resources. The previously recorded resources include one historic canal (80S02752) and one historic railway (80S02822). The newly recorded resources include one historic mobile home park (80S02983); two historic canals (80S02981 and 80S02982); three historic bridges (80S02942-80S02944); and 32 historic structures (80S02945-80S02976) (Figures 19-25; Table 5).

Table 5. Historic Resources Recorded within the Neptune Road APE.

FMSF Number	Name/Address Style		Year Built	Recommended NRHP Status
8OS02752	St. Cloud Canal	No Style	ca. 1883	Eligible
8OS02822	St. Cloud and Sugar Belt Railway	No Style	ca. 1888	Ineligible
8OS02942	Concrete Box Culvert and Weir	No Style	ca. 1959	Ineligible
8OS02943	Neptune Road Bridge over Florida's Turnpike	No Style	ca. 1963	Ineligible
8OS02944	Neptune Road Bridge over St. Cloud Canal	No Style	ca. 1957	Ineligible
8OS02945	1194 Stroupe Road	Frame Vernacular	ca. 1965	Ineligible
8OS02946	2317 Neptune Road Building 1	Frame Vernacular	ca. 1935	Ineligible
8OS02947	2317 Neptune Road Building 2	Frame Vernacular	ca. 1935	Ineligible
8OS02948	2345 Neptune Road	Masonry Vernacular	ca. 1949	Ineligible

Table 5. Historic Resources Recorded within the Neptune Road APE.

FMSF	Name/Address	Style	Year	Recommended
Number	Name/Address	Style	Built	NRHP Status
8OS02949	2357 Neptune Road	Masonry Vernacular	ca. 1970	Ineligible
8OS02950	2363 Neptune Road	Frame Vernacular	ca. 1953	Ineligible
8OS02951	2369 Neptune Road	Ranch	ca. 1957	Ineligible
8OS02952	2375 Neptune Road	Masonry Vernacular	ca. 1955	Ineligible
8OS02953	2381 Neptune Road	Ranch	ca. 1968	Ineligible
8OS02954	2393 Neptune Road	Masonry Vernacular	ca. 1948	Ineligible
8OS02955	2405 Neptune Road	Ranch	ca. 1971	Ineligible
8OS02956	2411 Neptune Road	Mid-Century Modern	ca. 1972	Ineligible
8OS02957	2415 Neptune Road	Masonry Vernacular	ca. 1972	Ineligible
8OS02958	1501 G&H Drive Building 1	Masonry Vernacular	ca. 1961	Ineligible
8OS02959	1501 G&H Drive Building 2	Masonry Vernacular	ca. 1961	Ineligible
8OS02960	1501 G&H Drive Mobile Home 1	Mobile Home	ca. 1970	Ineligible
8OS02961	1501 G&H Drive Mobile Home 2	Mobile Home	ca. 1970	Ineligible
8OS02962	1501 G&H Drive Mobile Home 3	Mobile Home	ca. 1970	Ineligible
8OS02963	1501 G&H Drive Mobile Home 4	Mobile Home	ca. 1970	Ineligible
8OS02964	1501 G&H Drive Mobile Home 5	Mobile Home	ca. 1970	Ineligible
8OS02965	1501 G&H Drive Mobile Home 6	Mobile Home	ca. 1970	Ineligible
8OS02966	1501 G&H Drive Mobile Home 7	Mobile Home	ca. 1970	Ineligible
8OS02967	1501 G&H Drive Mobile Home 8	Mobile Home	ca. 1970	Ineligible
8OS02968	1501 G&H Drive Mobile Home 9	Mobile Home	ca. 1969	Ineligible
8OS02969	1501 G&H Drive Mobile Home 10	Mobile Home	ca. 1969	Ineligible
8OS02970	1501 G&H Drive Mobile Home 11	Mobile Home	ca. 1969	Ineligible
8OS02971	2534 Neptune Road Building 1	Frame Vernacular	ca. 1925	Ineligible
8OS02972	2534 Neptune Road Building 2	Masonry Vernacular	ca. 1969	Ineligible
8OS02973	2545 Neptune Road	Masonry Vernacular	ca. 1955	Ineligible
8OS02974	1649 Breezewood Street	Masonry Vernacular	ca. 1926	Ineligible
8OS02975	4601 Neptune Road	Masonry Vernacular	ca. 1932	Ineligible
8OS02976	4125 Neptune Road	Frame Vernacular	ca. 1962	Ineligible
8OS02981	Peg Horn Slough Canal	No Style	Pre-1944	Ineligible
8OS02982	Partin Canal	No Style	Pre-1944	Ineligible
8OS02983	G and H Mobile Home Park	No Style	ca. 1962	Ineligible

Historic resources marked in yellow represent those considered individually eligible or eligible as a contributing resource group.

Descriptions and evaluations are provided below for the St. Cloud Canal (8OS02752), St. Cloud and Sugar Belt Railway (8OS02822), Concrete Box Culvert and Weir (8OS02942), Neptune Road Bridge over Florida's Turnpike (8OS02943), Neptune Road Bridge over St. Cloud Canal (8OS02944), Peg Horn Slough Canal (8OS02981), Partin Canal (8OS02982), and the G and H Mobile Home Park (8OS02983), as the presentation of their attributes in a table was deemed insufficient. Additional detail on the remaining resources in Osceola County is provided in the architectural resource table in **Appendix D**. FMSF forms and their associated maps and photographs are provided in **Appendix E**. The survey log sheet is provided in **Appendix F**.

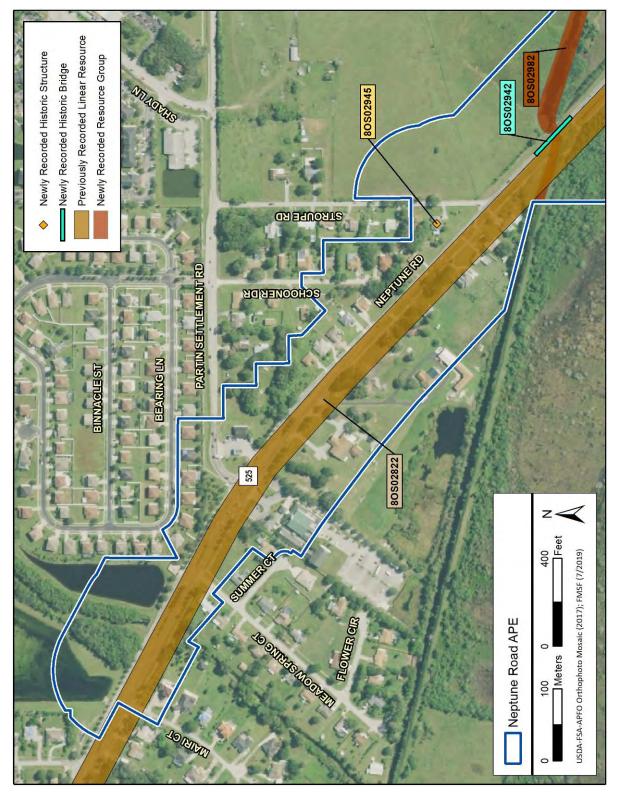


Figure 19. Historic resources recorded within the Neptune Road APE, map 1 of 7.

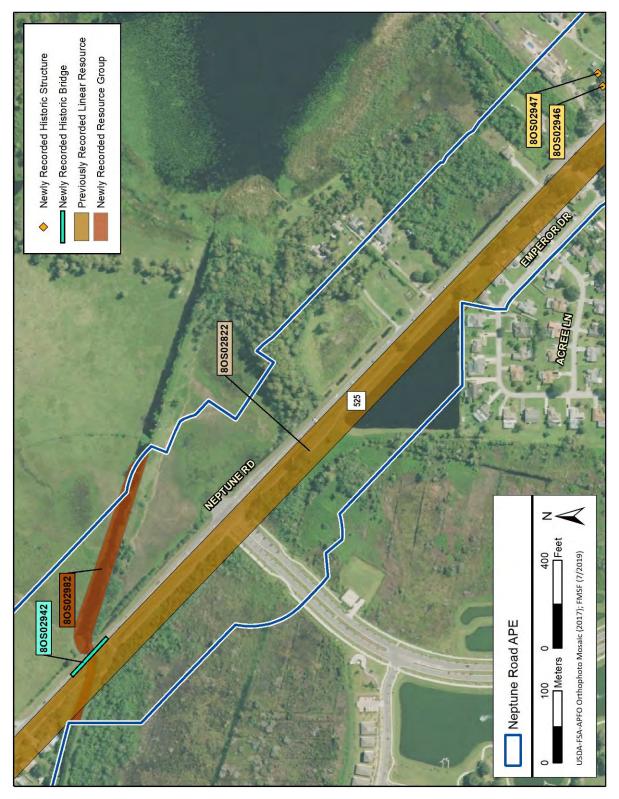


Figure 20. Historic resources recorded within the Neptune Road APE, map 2 of 7.

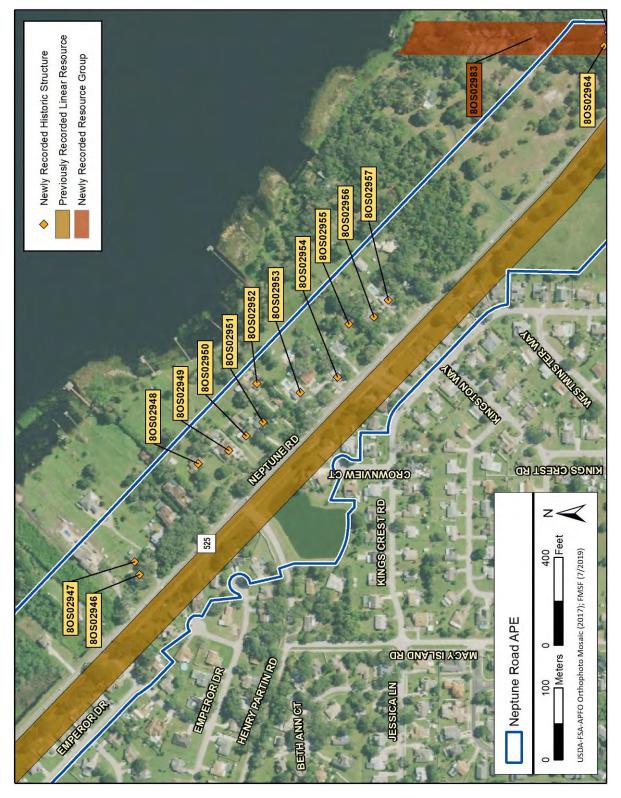


Figure 21. Historic resources recorded within the Neptune Road APE, map 3 of 7.

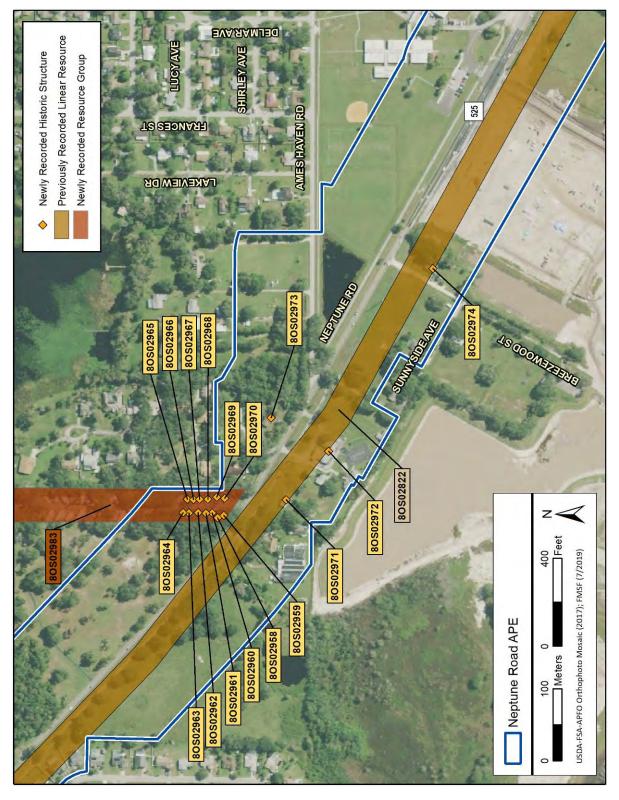


Figure 22. Historic resources recorded within the Neptune Road APE, map 4 of 7.

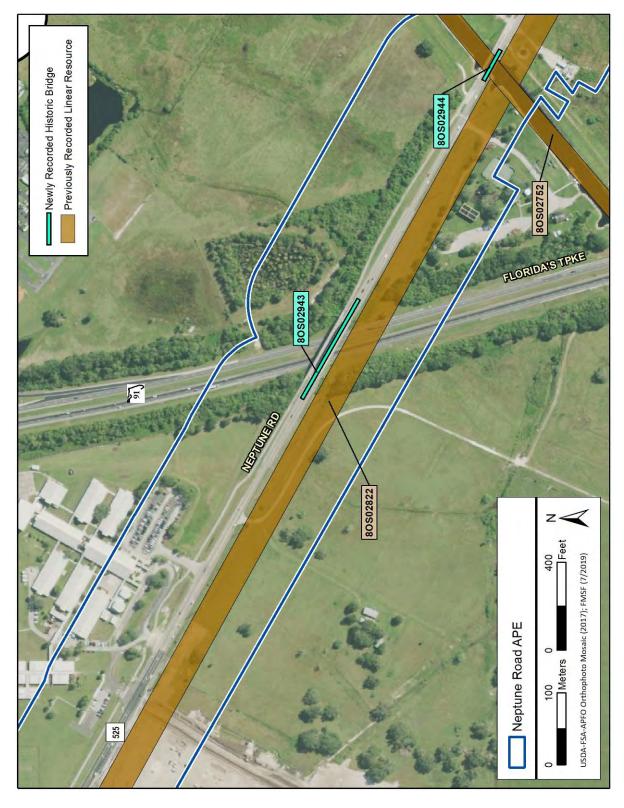


Figure 23. Historic resources recorded within the Neptune Road APE, map 5 of 7.

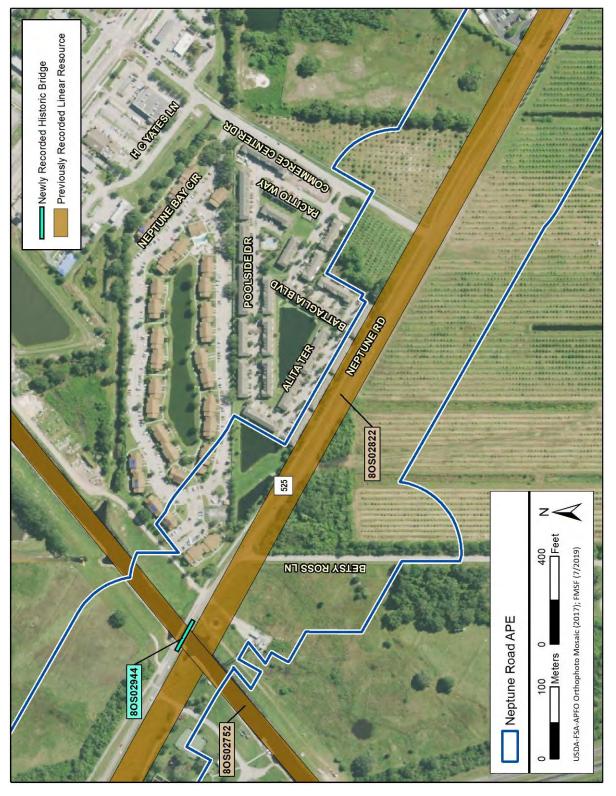


Figure 24. Historic resources recorded within the Neptune Road APE, map 6 of 7.

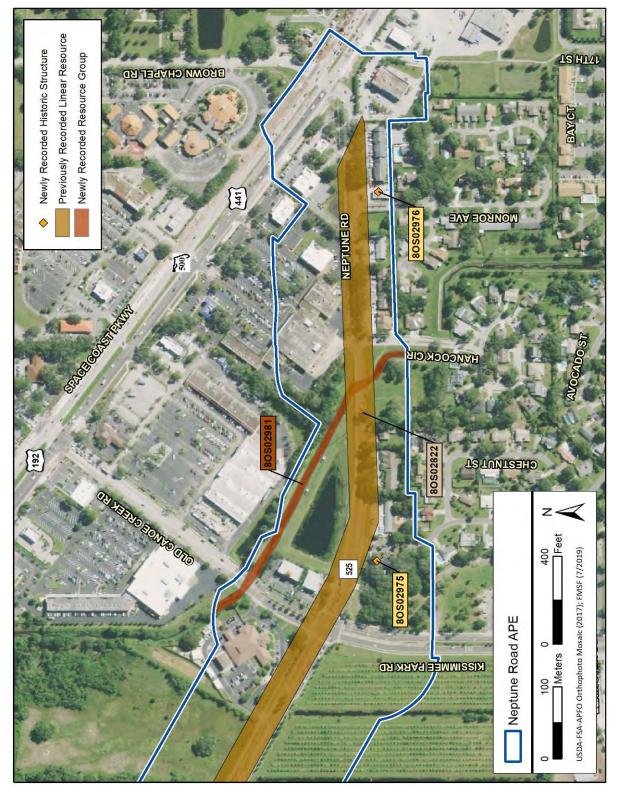


Figure 25. Historic resources recorded within the Neptune Road APE, map 7 of 7.

Architectural Styles Represented in the APE

The Neptune Road APE contains numerous architectural styles that represent the development of architecture and engineering in America during the nineteenth and twentieth centuries. **Table 6** provides the major architectural styles in the APE along with the number and percentages of resources of each style.

Table 6. Major Architectural Styles within the Neptune Road APE.

Architectural Style	Number of Examples	Percentage
Mobile Home	11	27.50%
Masonry Vernacular	11	27.50%
Frame Vernacular	6	15.00%
Ranch	3	7.50%
Mid-Century Modern	1	2.50%
No Style	8	20.00%

Mobile Home

There are 11 resources within the Neptune Road APE that are Mobile Homes (Figure 26). In the 1930s, travel trailers and campers emerged as some of the earliest examples of mobile homes. Their small size, generally no wider than 8 feet (2.4 meters) in the 1930s, meant that their use was most often restricted to that of a more mobile and transient nature (McAlester 2013:159). Symbols of motion, such as lightning or waves, were popular in early trailer design. Streamlined, vehicle-like bodies dominated the market. Doors usually featured a porthole or a rounded square window. Often silver with a rounded front and back, the trailers were short in length, generally around 25 feet (7.6 meters) long (Wallis 1991).



Figure 26. Resource 8OS02968 provides an example of a Mobile Home within the Neptune Road APE. Photograph facing southeast.

The mindset towards mobile homes began to change during World War II, when they were used in a semi-permanent manner to accommodate workers who had relocated in order to join the war effort in the various wartime industries (McAlester 2013:150). The use of mobile homes as permanent housing sparked interest. After the war, an effort to create designs that would allow for more permanent residence in mobile homes was seen (McAlester 2013; Wallis 1991). Manufacturers began offering upgrades, including picture windows and bay windows. Trailer manufacturers experimented with foldout porches, awnings, and other details for convenience on site. Trailer length and width often increased. In 1954, at the Florida Mobile Home Exposition in Sarasota, Elmer Frey introduced a trailer 10 feet (3.0 meters) wide and up to 50 feet (15.2 meters) long. It was built on a wood frame rather than a chassis (Wallis 1991).

As trailers increased in length, a distinction grew between the mobile home and the house trailer. Over time, interiors of house trailers were made more house-like while the exteriors

continued to appear vehicular. Nonetheless, Wallis notes in *House Trailers: Innovation and Accommodation in Vernacular Housing* that "the more sculptural shaping of the sides of the trailer for streamlining had given way to a boxier appearance better suited to the utilization of interior space" (Wallis 1989:40).

Common types of trailer homes include the single-shed development, featuring an enclosed or open self-supported structure attached along the entry side of the mobile home, and the double-shed development, consisting of the original trailer flanked on both sides by sheds (Wallis 1989:41).

Masonry Vernacular

There are 11 resources within the Neptune Road APE that are representative of the Masonry Vernacular style (Figure 27). Masonry Vernacular buildings were designed on a basis of local need, material availability, and tradition. Materials of this style include brick, cement block, oolitic limestone, Ocala block, hollow clay tile, stucco, and stone, amongst others. Decoration is often sparse. However, examples of Masonry Vernacular may be influenced by a variety of high styles.

Characteristics of the Masonry Vernacular style vary widely based on location, need, and experience of the builder. The style is further characterized by:

- Masonry construction;
- Simple, geometric forms;
- Relatively unadorned exterior;
- Some variation of stone, concrete, brick, or stucco as the exterior material; and
- Design meant to take advantage of the environment and site (McAlester 2013).

Frame Vernacular

There are six resources within the Neptune Road APE that have elements of the Frame Vernacular style (Figure 28). The Frame



Figure 27. Resource 8OS02954 provides an example of the Masonry Vernacular style within the Neptune Road APE. Photograph facing northeast.



Figure 28. Resource 8OS02971 provides an example of the Frame Vernacular style within the Neptune Road APE. Photograph facing west.

Vernacular style represents those "ordinary" wood frame buildings designed on a basis of local need, material availability, and tradition. The local environment and experience of the builder, often not architecturally trained, provides more influence over the end product than that of most other styles (City of Miami 2017; Glassie 1990). Decoration is often sparse; however, examples of the Frame Vernacular may be influenced by a variety of high styles.

Characteristics of the Frame Vernacular style often include, but are not limited to:

- Balloon frame;
- Rectangular plan;
- One to two stories;
- Wood siding: weatherboard, drop siding, etc.; and
- Siding may have been replaced with vinyl, aluminum, asbestos shingle, etc. (City of Miami 2017).

Ranch House

There are three resources within the Neptune Road APE that have elements of the Ranch style (Figure 29). The evolution of the Ranch style had multiple centers: the Chicago area, inspired by the Prairie Houses of Frank Lloyd Wright; the American southwest, the vestiges of working ranches providing inspiration; and California, where rapid growth in the early part of the twentieth century called for a new vernacular architecture undertaking (Timberg 2005). California in the 1930s saw architects Cliff May, H. Roy Kelley, William Wurster, amongst others, adapting traditional houses of southwestern ranches, haciendas, and Spanish Colonial Revival styles to a suburban



Figure 29. Resource 8OS02953 provides an example of the Ranch style within the Neptune Road APE. Photograph facing northeast.

plan (NPS 2002:66). The initial popularity of the Ranch style can be attributed to its affordability and its references to the culture of the American West (Hubka 1995). Their ease of construction further contributed to their popularity during the post-World War II period, when families left the cities in droves (Salant 2006). The Ranch style was the most prevalent in the United States between 1940 and 1970 (Salant 2006). Exterior material of early ranches focused on natural material and often included adobe, board and batten, and brick (NPS 2002:66). As the twentieth century wore on, concrete block, stucco, and other materials were also used. Characteristics of the Ranch style often include, but are not limited to:

- Single story;
- Emphasis on horizontality;

- Low-pitched roofs with deep set eaves;
- Set parallel to the street;
- Rectangular, L-, or U-shaped plan;
- Open plans;
- Attached garages;
- Modest stylistic details; and
- Picture windows.

Mid-Century Modern

There is one resource within the Neptune Road APE that has elements of the Mid-Century Modern style (Figure 30). The Mid-Century Modern Style rose to popularity from the 1940s through the 1960s. World War II introduced experimental technologies and materials that were used after the war in building new homes for the returning veterans and their families. The increasing popularity of the suburbs created new ideas on healthy living and new design challenges for architecture. Furthermore, an influx of European immigration during the war led to blending of the earlier Bauhaus movement with that of American architectural traditions (Eng n.d.; Sadowsky n.d.). response to these stimuli, Mid-Century



Figure 30. Resource 8OS02956 provides an example of the Mid-Century Modern style within the Neptune Road APE. Photograph facing northeast.

Modern was characterized by a futuristic aesthetic with an emphasis on function (Richman-Abdou 2017).

In an effort to harmonize the exterior natural world with the interior space, large expanses of plate glass and sliding glass doors were employed in design. The style is further characterized by:

- low profile;
- horizontal composition;
- the use of modern materials;
- angular shapes and flat planes;
- open floor plans;
- oversized flared eaves and butterfly roofs;
- changes in elevation;
- lack of reference to earlier styles; and
- natural light (Carney 2018; Eng n.d.; Sadowsky n.d.; Richman-Abdou 2017).

No Style

There are eight resources within the Neptune Road APE that do not have a style. This term is generally applied to structures, objects, districts, cemeteries, or previously recorded resources that do not display one singular style or that style does not pertain.

NRHP EVALUATIONS

Linear Resources

St. Cloud Canal (80S02752)

The St. Cloud Canal (80S02752), ca. 1883, is a previously recorded historic resource connecting Lake Tohopekaliga and East Lake Tohopekaliga in Osceola County (see Figure 24). The canal's total length is 3.9 miles (6.3 kilometers) with a 0.12-mile (0.2-kilometer) segment within the Neptune Road APE. Resource 80S02752 is located between Florida's Turnpike (SR 91) and US 441 (SR 500) within Osceola County in Section 4 of Township 26 South, Range 30 East, as shown on the 2018 Saint Cloud North, Fla. USGS quadrangle map. Within the Neptune Road APE, the canal runs northeast-southwest. Resource 80S02752 is a ditch-type canal and is approximately 100 feet (30.5 meters) wide, including the embankments. While its depth varies, the SFWMD states that it measures 30 feet (9.1 meters) wide at the bottom (Carter et al. 2010). The banks of the canal are covered in various locations with concrete rip-rap and vegetation (Figure 31). The canal crosses under a non-historic pedestrian bridge and FDOT Bridge No. 924049 (80S02944) within the Neptune Road APE. Presently, 80S02752 is known as the St. Cloud Canal (C-31) and part of the Upper Kissimmee River watershed, which is managed by the SFWMD (Carter et al. 2010).

The history of the St. Cloud Canal (80S02752) is linked to late nineteenth-century financial and land development activities in Florida. In order to build railroads and make other improvements in the state after the Civil War, it was necessary to raise capital; therefore, the state's Internal Improvement Commission sold 4 million acres of land for \$1 million in 1881 to the Florida Land and Improvement Company, owned by Hamilton Disston and his associates (Light and Dineen 1994:53; Mohl and Mormino 1996:427). Disston, a wealthy Philadelphia capitalist, was introduced to the idea of draining areas of Florida, including the Everglades, while on a fishing trip to the state in 1879. In 1881, Disston signed a contract with the state whereby he would, through the Atlantic and Gulf Coast Canal and Okeechobee Land Company, drain some 12 million acres across central and southern Florida in exchange for title to 4 million of these acres (SEARCH 2014).

In 1882, Disston began the construction of the Southport Canal to connect Lake Tohopekaliga and Lake Cypress. After the completion of that leg of the canal, Disston's dredge began work connecting Lake Tohopekaliga and East Lake Tohopekaliga. The canal, which was begun in









Figure 31. Representative views of Resource 8OS02752 within the Neptune Road APE. Top left: Facing northeast; top right: facing east; bottom left: facing east; bottom right: facing southwest.

January 1883, was completed in September of the next year. In 1888, Disston terminated dredging due to the failure of the drainage project to create sugarcane-producing land (Grismer 1949). The economic downturn of 1893 and Disston's death shortly thereafter brought this work to a halt. However, Disston's efforts laid the intellectual groundwork for later governmental efforts to drain the Everglades (SEARCH 2014).

The St. Cloud Canal is an important engineering feature that was a crucial part of Disston's plan for land reclamation in support of agricultural purposes, specifically his sugar plantation. Furthermore, the St. Cloud Canal was part of Disston's broader project to connect Kissimmee with the Gulf of Mexico providing transportation for his sugar and other goods (**Figure 32**).

Assessment

While canals are common features in Florida, having been constructed since the eighteenth century, it is usually larger and older canals, such as the St. Cloud Canal (8OS02752), that are NRHP-eligible (Jones 2012:24-25).



Figure 32. St. Cloud Canal running through the Disston sugar plantation, ca. 1900. Source: Florida Memory, No. RC02678.

Based on the historic context and the results of the present survey, the segment of the St. Cloud Canal (8OS02752) within the Neptune Road APE is significant for listing in the NRHP under Criterion A for its association with the development of Osceola County. The building of the St. Cloud Canal helped to establish the cities of Kissimmee (1883) and St. Cloud (1909) by bringing workers for canal construction and later for the railroad. The canal is significant under Criterion C for engineering distinction as an example of a nineteenth-century canal constructed as part of a larger system of canals that was proposed to connect Kissimmee to the Gulf of Mexico. Furthermore, 8OS02752 is proposed as locally significant under Criterion B for its association with Hamilton Disston, an important figure in Osceola County history. Finally, 8OS02752 is not considered NRHP-eligible under Criterion D because it lacks the potential to yield further information of historical importance. Resource 8OS02752 retains its integrity of location, design, materials, feeling, and association (SEARCH 2014). While the overall setting of the canal has been somewhat lessened by nearby residential and commercial development and numerous spans across the canal, it continues to function in its historic role. Therefore, the segment of the canal within the Neptune Road APE retains enough historic integrity to express its significance under Criteria A, B, and C and is considered a contributing element to the overall NRHP-eligible St. Cloud Canal (80S02752).

Effects

In order to facilitate an effects discussion for the St. Cloud Canal (80S02752), a discussion about the relationship between historic canal function, period of construction, and historic integrity is presented here.

A 2005 memorandum on canals by Sherry Anderson, which was revised in 2012 by Ginny Jones and is Appendix E to the 2010 FMSF *Guide to the Resource Group Form*, was used as a guide to aid in the evaluation of Resource 80S02752. The memorandum provides guidance on establishing the historic context for Florida's canal resources to aid in the evaluation of their eligibility to the NRHP. According to the FMSF memorandum, canals are common throughout Florida and "most of those built as drainage ditches in the twentieth century will probably not be considered significant" (Jones 2012:24). The memorandum goes onto say:

It is usually the older canals (19th c.), transportation canals, larger regional canals dug as part of the early 20th c. reclamation activities, or canals used in industry (such as logging, cotton) that may be potentially eligible (Jones 2012:24-25).

Changes that could potentially alter the integrity of a canal include the following:

- Re-routing of the canal;
- Disruption of canal (cutting off or filling in);
- Substantial widening or substantial loss of width;
- Concentrated number of roadways and other crossovers that prohibit navigability (only important if navigability was part of its historic use);
- Severing of canal from other waterways (larger canals, turning basins, etc.)
 which results in change of historic function; and
- Removal of historic ancillary structures original to canal's design and purpose (pumping stations, locks, railroads, docks, etc.). The loss of one feature may not be enough to substantially damage integrity but the removal of many such features may collectively inhibit the resource's ability to convey its significance (Jones 2012:25).

Finally, the memorandum states:

Types of changes that may not substantially damage the integrity include loss of a single historic ancillary feature, routine maintenance and rebuilding of canal walls using same material type, addition of non-historic features (pumping station, etc.), addition of several roads that do not prohibit navigability throughout the majority of the canal. Canals can have 'non-contributing' portions as well but that the overall canal may still be considered potentially eligible (Jones 2012:25).

Within the Neptune Road APE, none of the aforementioned changes have occurred. The proposed improvements along the St. Cloud Canal (80S02752) include reconstruction of the existing two-lane road into a four-lane divided roadway on a new bridge across the canal. In addition, the project proposes incorporating the existing Florida Trail, located to the north into the new bridge and constructing a new trail to the southeast-southwest that will also cross the new bridge. The proposed bridge is 140 feet (42.7 meters) long by 105 feet (32 meters) wide and includes three bents to be placed into the canal. In addition, the project proposes incorporating the existing Florida Trail, located to the north, into the new bridge and constructing a new trail to the southeast-southwest that will also cross the new bridge. None of the proposed improvements, including the new road and bridge over the St. Cloud Canal (80S02752), will dramatically alter the integrity of the canal. As seen in Figure 31, two bridges already span the canal within the Neptune Road APE, and they have not diminished the integrity of the canal. A review of the current plans indicates that the proposed work will not involve rerouting of the canal, disruption of the canal, or widening or loss of width or the severing of the canal from other waterways. While the proposed project will acquire 0.3 acres within the St. Cloud Canal right-of way, none of the proposed improvements will diminish the integrity of the St. Cloud Canal (80S02752) or its ability to express the characteristics that make it eligible for listing in the NRHP. As, such, the proposed improvements will have no adverse effect on 80S02752. No further architectural work is recommended.

St. Cloud and Sugar Belt Railway (80S02822)

The St. Cloud and Sugar Belt Railway (8OS02822), ca. 1888, is a previously recorded historic railroad that connected Kissimmee to Narcoossee for a total distance of 14 miles (22.5 kilometers) in Osceola County (see **Figures 19-25**). The approximately 4-mile (6.4-kilometer) segment of 8OS02822 within the Neptune Road APE runs parallel to County Road (CR) 525/Neptune Road in Section 25 of Township 25 South, Range 29 East; Sections 30, 31, and 32 of Township 25 South, Range 30 East; and Sections 4 and 5 of Township 26 South, Range 30 East, as shown on the 2018 *Saint Cloud North* and *Saint Cloud South, Fla*. USGS quadrangle maps. Within the Neptune Road APE, the abandoned railway corridor runs northwest-southeast (**Figure 33**).





Figure 33. Representative views of Resource 8OS02822 within the Neptune Road APE. Left: facing northwest; right: facing southeast.

The St. Cloud and Sugar Belt Railway was incorporated by 1888 and constructed by the Disston sugar interests to reach the St. Cloud plantation (Pettengill 1998). The railway allowed Hamilton Disston to ship his sugar and citrus products from Narcoossee to the South Florida Railroad junction in Kissimmee (Dickinson and Wayne 2015). Additionally, passengers traveled along the St. Cloud and Sugar Belt Railway in a single passenger car (Pettengill 1998). In 1892, the St. Cloud and Sugar Belt Railway was absorbed by Henry Plant's South Florida Railroad. In 1902, the Atlantic Coast Line (ACL) purchased the Plant System and continued to operate the line from Narcoossee to Kissimmee until 1950 (Leod and Murdock 1994). Following ACL's abandonment, the railroad cross ties, tracks, and ballast were removed.

Assessment

Florida's Historic Railroad Resources, the NRHP Multiple Property Nomination Form, was used as a guide to evaluate this segment of 8OS02822 (Johnston and Mattick 2000). The nomination establishes the historic contexts for Florida's railroad resources to aid in the evaluation of their eligibility for the NRHP. According to the nomination, a rail roadbed is an F.3 property type (Rail Structure: Roadbed) and consists of ballast, cross ties, rails, and tie plates, all of which are not present in this section of 8OS02822 (Johnston and Mattick 2000:F-63). To be eligible for listing in the NRHP, rail roadbeds must have served a historic railroad transportation function and have been constructed during one of Florida's historic railroad periods (Johnston and Mattick 2000:67). Resource 8OS02822 satisfies these stipulations: it was built as a railroad link connecting Narcoossee to Kissimmee during the Disston Era of Expansion and Consolidation (1881–1903) (Johnston and Mattick 2000:6-10).

To be significant, the railroad also must be associated with an important local historical event (Johnston and Mattick 2000:67). As previously determined, 80S02822 is significant for its association with the establishment of the expanded railroad network within central Florida as a means to transport agricultural products to markets, to transport tourists from Kissimmee to Narcoossee, and to open up the area to settlement. During the late nineteenth and early twentieth centuries, the construction of railroad in this part of Florida allowed the export of citrus, sugar, and passengers from Florida hinterlands to market areas of the country, thus integrating Florida into the national economy. The creation of the overall transportation network, not just the main lines, represented the expansion of the local economy and its integration into the larger national economy, an important historical theme.

Railroads are dynamic and changing. As parts of an engineering system that must be improved over time, updates are often made, including the replacement of rails and cross ties. Such maintenance typically does not adversely affect the integrity of a railroad. Types of changes that could substantially affect the integrity of a linear resource such as a railroad include the following:

- Rerouting of the railroad corridor;
- Disruption of the railroad, such as dead-ending or removal of roadbed;
- Substantial widening or substantial loss of width;

- Concentrated number of roadways or other crossovers that prohibit travel;
- Severing of the railroad from other transportation resources such as other railroad, stations, depots, railyards, or shipyards that results in change of historic function; and
- Removal of historic ancillary structures original to the Railroad's design and purpose such as roundhouses, water tanks, turntables, or siding (the loss of one feature may not be enough to substantially damage integrity, but the removal of many such features may collectively inhibit the resource's ability to convey its significance).

Within the Neptune Road APE, all of the above-mentioned conditions apply to 8OS02822. Therefore, it is the opinion of SEARCH that the segment of 8OS02822 within the APE does not retain a high level of its historic integrity.

The St. Cloud and Sugar Belt Railway (8OS02822) has been previously determined ineligible for the NRHP based on its lack of integrity (Dickinson and Wayne 2015). Resource 8OS02822 is significant under Criterion A for Tourism and Commerce for its association with Florida tourism, and the sugar and citrus industries. Additionally, 8OS02822 is significant under Criterion B for its association with Hamilton Disston and the Disston purchase. However, 8OS02822 lacks the physical integrity necessary to convey its significance under Criteria A and B. Additionally, 8OS02822 is not significant under Criterion C for engineering merit or Criterion D as it lacks the potential to yield further information of historical importance. Therefore, it is the opinion of SEARCH that the section of 8OS02822 within the Neptune Road APE is ineligible for the NRHP due to a lack of historic integrity.

Peg Horn Slough Canal (80S02981)

The Peg Horn Slough Canal (80S02981), constructed pre-1944, is a newly recorded historic canal located in Osceola County (Figure 34; see Figure 25). The resource is situated in Section 4, Township 26 South, Range 30 East, as shown on the 2018 Saint Cloud North, Fla. and Saint Cloud South, Fla. USGS quadrangle maps. Resource 80S02981 is a shallow canal with dirt sides that travels roughly northwest to the St. Cloud Canal in the north to the Peg Horn Slough in the south. Within the APE, the canal runs northeast to 1,527.7 southwest for about feet



Figure 34. Resource 8OS02981, facing northwest.

(465.6 meters), beginning about 167.7 feet (51.1 meters) northwest of Old Canoe Creek Road. The segment of the canal within the Neptune Road APE is roughly 36.5 feet (11.1 meters) wide, including the embankments. The canal is a dug-out channel with dirt and grass embankments on both sides, intended to provide drainage into the St. Cloud Canal to the north and Lake Tohopekaliga to the south. Within the APE, it passes underneath Old Canoe Creek Road and Neptune Road as they travel over culverts. The embankments are somewhat overgrown.

While the exact date of the canal's construction is unknown, an analysis of historic aerial photographs and USGS topographic maps reveals that the segment of the canal within the APE was constructed prior to 1944.

Assessment

Based on the field survey and further research, it is the opinion of SEARCH that Resource 8OS02981 is not significant under NRHP Criterion A because it is not indicative of a particular era and is not associated with any significant period, event, or theme. Furthermore, the resource is not significant under Criterion B because it lacks association with any person(s) significant in history. Also, the resource is not significant under Criterion C due to its lack of architectural or engineering distinction. The canal is a dug-out, dirt-lined channel with no outstanding engineered features or design. Finally, Resource 8OS02981 is not significant under Criterion D because it lacks the potential to yield further information of historical importance. It is the opinion of SEARCH that 8OS02981 is not eligible for listing in the NRHP, either individually or as a contributor to a larger system of canals.

Partin Canal (80S02982)

The Partin Canal (8OS02982), pre-1944, is a newly recorded historic canal located in Osceola County (see **Figure 19**). The resource is situated in Section 5, Township 26 South, Range 30 East, as shown on the 2018 *Saint Cloud North, Fla.* USGS quadrangle map. Resource 8OS02982 currently connects Fish Lake with Lake Tohopekaliga for a total length of approximately 1.9 miles (3.1 kilometers). The 0.23-mile (0.4-kilometer) segment of the Partin Canal within the Neptune Road APE is located northwest and southeast of Neptune Road. Resource 8OS02982 is a ditch-type canal and is approximately 45 feet (13.7 meters) wide, including the embankments and roughly 3 feet (0.9 meters) deep. Northwest of Neptune Road, the grassy embankments include what is labeled as a "spoil bank" on historic topographic maps (USGS 1954a, 1954b), while southeast of the road, the canal is almost level with the surrounding fields (**Figure 35**). A concrete box culvert and weir (8OS02942) controls the flow of the canal from southeast to





Figure 35. Representative views of Resource 8OS02982 within the Neptune Road APE. Left: facing southeast; right: facing southeast.

northwest. A contemporary pedestrian weathering steel bridge spans the canal directly northwest of Neptune Road. The segment of the Partin Canal northeast of Neptune Road is also known as Fish Lake Canal and appears after the January 1959 aerials (USDA 1959). It is likely construction of the northeastern portion of the canal and the Concrete Box Culvert (80S02942) occurred simultaneously in 1959. The portion of the canal and levee that ran parallel to Neptune Road prior to 1959 no longer exists. While the exact date of the canal's construction is unknown, an analysis of historic aerial photographs and USGS topographic maps reveals that the segment of the canal within the APE was constructed prior to 1944. While the Partin Canal (80S02982) is likely associated with the Osceola's Partin family, no direct connection between the family and the canal could be established.

Assessment

Based on the field survey and further research, it is the opinion of SEARCH that 80S2982 is not significant under NRHP Criterion A because it is not indicative of a particular era and is not associated with any significant period, event, or theme. Furthermore, the resource is not significant under Criterion B because it lacks association with any person(s) significant in history. While the Partin Canal (80S02982) may be associated with the Partin family, no direct connection could be established. Furthermore, there are better examples of property linked to the family, such as the Partin Ranch. Also, the resource is not significant under Criterion C due to its lack of architectural or engineering distinction. The canal is a dug-out, dirt-lined channel with no outstanding features or design. Finally, Resource 80S02982 is not significant under Criterion D because it lacks the potential to yield further information of historical importance. It is the opinion of SEARCH that 80S02982 is not eligible for listing in the NRHP, either individually or as a contributor to a larger system of canals.

Historic Bridges

Concrete Box Culvert and Weir (80S02942) (FDOT Bridge No. 924008)

Resource 8OS02942 (FDOT Bridge No. 924008) is a newly recorded historic concrete box culvert that carries the Partin Canal (8OS02982), alternately known as the Fish Lake Canal, under Neptune Road in Osceola County (see **Figure 19**). Resource 8OS02942 is located in Osceola County in Section 31, Township 25 South, Range 30 East, as shown on the 2018 *Saint Cloud North, Fla.* USGS quadrangle map. Constructed in 1959, Resource 8OS02942 (FDOT Bridge No. 924008) is a 38-foot (11.6-meter) wide, three span, concrete box culvert. Concrete wingwalls extending from the east/west face of the culvert contain the earthen embankments. Resource 8OS02942 includes a concrete and steel weir attached to its east wing walls (**Figure 36**). The weir presumably controls the flow of water from Fish Lake into the Partin Canal (8OS02982); however, parts of the water control mechanisms are missing.

Assessment

Resource 8OS02942 (FDOT Bridge No. 924008) was not included in the latest state-wide bridge survey (Archaeological Consultants, Inc. [ACI] 2012). Based on available information and field





Figure 36. Representative views of Resource 8OS02942 within the Neptune Road APE. Left: facing southeast; right: facing northeast.

research, Resource 8OS02942 (FDOT Bridge No. 924008) does not appear to meet the minimum criteria for NRHP-eligibility. Resource 80S02942 does not possess sufficient historical significance under Criterion A and is not indicative of a particular era nor associated with any significant period, event, or theme. Resource 80S02942 is not eligible under Criterion B because it lacks association with any person(s) significant in history. Furthermore, 80S02942 is not eligible under Criterion C due to its lack of architectural and engineering distinction. Resource 8OS02942 is a three-span concrete box culvert that represents a typical approach to concrete box culvert/weir construction in Florida, as well as the United States in general. Resource 8OS02942 is a modest example of a concrete box culvert/weir and does not possess high artistic value, nor does it embody any distinctive methods of construction. Finally, the concrete box culvert is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Due to its common standardized design and lack of known historical associations of significance, it is the opinion of SEARCH that Resource 8OS02942 (FDOT Bridge No. 924008) does not meet the minimum criteria for listing in the NRHP, either individually or as a contributing resource to an existing or potential historic district.

Neptune Road Bridge over Florida's Turnpike (80S02943) (FDOT Bridge No. 920044)

Resource 8OS02943 (FDOT Bridge No. 920044) is a newly recorded historic bridge built in 1963 and located in Osceola County (see **Figure 23**). The resource is situated in Section 5, Township 26 South, Range 30 East, as shown on the 2018 Saint Cloud North, Fla. USGS quadrangle map. The dimensions of the four-span bridge are approximately 257 feet (78.3 meters) long by 34 feet (10.4 meters) wide, edge-to edge. The approaches to Resource 8OS02943 from the northwest and southeast are both more than 450 feet (137.2 meters) and feature grassy sloped earthen embankments. The substructure of 8OS02943 consists of pre-stressed concrete girders supported by open bent concrete piers (**Figure 37**). The bridge carries a two-lane, two-way roadway of northwest/southeast bound traffic on concrete decking over Florida's Turnpike. The bridge's roadway is bounded by concrete curbing and low concrete rails topped by round

metal pipe railing. The bridge has short concrete abutments on large, steeply sloped earthen embankments covered with concrete.

Assessment

Resource 80S02943 (FDOT Bridge No. 920044) was not included in the latest statewide bridge survey (ACI 2012). Based on the historic context and the results of the present survey, it is the opinion of SEARCH that Resource 80S02943 (FDOT Bridge No. 920044) is not significant under NRHP Criterion A because it is not indicative of a



Figure 37. Resource 8OS02943, facing northwest.

particular era and is not associated with any significant period, event, or theme. Furthermore, the resource is not eligible under Criterion B because it lacks association with any person(s) significant in history. Also, the resource is not eligible under Criterion C due to its lack of architectural and engineering distinction. Resource 80S02943 is a modest example of a concrete girder bridge and does not possess high artistic value, nor does it embody any distinctive methods of construction. Finally, 80S02943 is not significant under Criterion D because it lacks the potential to yield further information of historical importance. It is the opinion of the SEARCH that Resource 80S02943 (FDOT Bridge No. 920044) lacks the minimum criteria for listing in the NRHP, either individually or as a contributing resource to an existing or potential historic district.

Neptune Road Bridge over St. Cloud Canal (80S02944) (FDOT Bridge No. 924049)

Resource 8OS02944 (FDOT Bridge No. 924049) is a newly recorded historic bridge built in 1957 and located in Osceola County (see **Figure 24**). The resource is situated in Section 5, Township 26 South, Range 30 East, as shown on the 2018 Saint Cloud North, Fla. USGS quadrangle map. The dimensions of the five-span bridge are approximately 100 feet (30.5 meters) long by 35 feet (10.7 meters) wide, edge-to edge. The substructure of 8OS02944 consists of open bent concrete piers supporting the deck (**Figure 38**). The bridge carries a two-lane, two-way roadway of northwest/southeast bound traffic on concrete decking over the NRHP-eligible St. Cloud Canal (8OS02752). The bridge's roadway is bounded by low concrete curbing and galvanized steel W-guardrails supported by a combination of precast concrete posts and wide flange galvanized steel sections bolted to the deck. The bridge has short concrete abutments on sloped earthen embankments covered with concrete rip rap and concrete block mattresses.

Assessment

Resource 8OS02944 (FDOT Bridge No. 924049) was not included in the latest statewide bridge survey (ACI 2012). Based on the historic context and the results of the present survey, it is the opinion of SEARCH that Resource 8OS02944 (FDOT Bridge No. 924049) is not significant under









Figure 38. Representative views of Resource 8OS02944 within the Neptune Road APE. Top left: facing northeast; top right: facing east; bottom left: facing east; bottom right: facing south.

NRHP Criterion A because it is not indicative of a particular era and is not associated with any significant period, event, or theme. Furthermore, the resource is not eligible under Criterion B because it lacks association with any person(s) significant in history. Also, the resource is not eligible under Criterion C due to its lack of architectural and engineering distinction. Resource 8OS02944 is a modest example of a concrete slab bridge and does not possess high artistic value, nor does it embody any distinctive methods of construction. Finally, 8OS02944 is not significant under Criterion D because it lacks the potential to yield further information of historical importance. It is the opinion of the SEARCH that Resource 8OS02944 (FDOT Bridge No. 924049) lacks the minimum criteria for listing in the NRHP, either individually or as a contributing resource to an existing or potential historic district.

Historic Resource Group

G and H Mobile Home Park (80S02983)

G and H Mobile Home Park (8OS02983) is a newly recorded historic resource group located in Osceola County (see **Figure 22**). The resource is situated in Section 32 of Township 25 South,

Range 30 East, as shown on the 2018 *St. Cloud North, Fla.* USGS quadrangle map. Resource 80S02983 is a ca. 1962 mobile home park that consists of an office (80S02958), an outbuilding (80S02959), and several mobile homes (80S02960-80S02970) within the Neptune Road APE. To the north of the Neptune Road APE is an outdoor community area and access to Fish Lake associated with 80S02983. The G and H Mobile Home Park (80S02983) was designed with the older units set perpendicular to its road in the southern portion and the newer units in the northern portion set in a herringbone pattern. Many of the mobile homes have permanent additions made of concrete block, carports, or porches (**Figures 39** and **40**).

Before World War II, travel trailers, also known as recreational vehicles (RVs), were a common way for families to travel inexpensively. In order to accommodate this type of travel, trailer camps were developed particularly concentrated in California, Florida, and the Midwest. However, post-World War II, the travel trailer industry transitioned as the focus moved from mobility to semi-permanent occupancy. During the 1950s, Elmer Frey, president of Marshfield Homes, developed the idea for the Tenwide, which he coined as the mobile home. The Tenwide was a trailer designed to be 10 feet (3.0 meters) wide and had space available for a corridor from the front to the back of the trailer. This design allowed floor plans to shift and made the trailers feel more like a typical home. By 1960, Tenwide designs dominated the industry, and nine years later, 14-foot (4.3-meter) wide and double-wide (28-foot [8.5-meter] wide) models were being mass-produced. In 1963, the travel trailer and mobile home industries officially split with the establishment of the Recreation Vehicle Association and the Mobile Home Manufacturers Association (MHMA). The Parks Division of the MHMA designed mobile home parks from 1962 to 1972 and established guidelines for lot sizes and the positioning of mobile homes on lots (Lawrence 2014).

The first mobile home park developed in America, Trailer Estates ca. 1955, was created in Bradenton, Florida. The park was a planned community of 160 acres and included amenities such as social activities, shuffleboard courts, a grocery store, and a marina. Individuals, mainly retirees, purchased individual lots for their mobile homes, paid a monthly fee, and signed a



Figure 39. Aerial photograph of 8OS02983 showing the layout of the mobile home park and Fish Lake access; north is located to the right. Source: FDOT 2017.



Figure 40. Representative photographs of 8OS02983 within the Neptune Road APE. Top left: facing north; top right: facing northwest; bottom left: facing southeast; bottom right: facing northwest.

covenant regarding zoning regulations for pets and families, exterior additions, and lot maintenance. The layout of Trailer Estates was a gridded streetscape with mobile homes set in a herringbone pattern to allow for maximum density and ease of mobile home delivery. Trailer Estates is one of many examples of a professionally planned mobile home park with several amenities; however, a majority of mobile home parks are considered vernacular or utilitarian parks. The vernacular parks focused on function and utility by developing on parcels that had a naturally low-sloping grade and mobile homes were permissible by zoning regulations. Many layouts were possible; however, the most simple and common was the single arterial road with units situated perpendicularly on either side. The road could be paved or unpaved and typically did not have sidewalks (Lawrence 2014). According to Lawrence (2014), nearly every town in the United States has vernacular mobile home parks especially on their outskirts. Typical elements found in all mobile parks include:

- Minimally graded site;
- Consistent and organized pattern of units;
- Little to no vegetation between streets and mobile homes;
- Basic amenities such as electricity and water; and

 Additional amenities provided at the property owners discretion, which could include things like laundry facilities, indoor/outdoor community spaces, pools, playgrounds, marinas, etc. (Lawrence 2014).

Assessment

Based on the historic context and the results of the present survey, 80S02983 is not significant under Criterion A as it is not indicative of a particular era nor associated with any significant period, event, or theme. Resource 80S02983 is not eligible under Criterion B because it lacks association with any person(s) significant in history. Furthermore, 80S02983 is not eligible under Criterion C due to its lack of architectural distinction. G and H Mobile Home Park (8OS02983) is an example of a vernacular mobile home park based on the layout and amenities visually evident. Resource 80S02983 has an arterial paved road with one speed bump with mobile homes to either side. The older mobile homes are set perpendicularly to the road at a 90-degree angle, while the mobile homes placed after 1969 are set in a herringbone pattern. The design of 80S02983 maximizes the available space for mobile homes on the parcel, but also provides a few amenities such as a centrally located trash facility and mailboxes, and an outdoor communal space with access to Fish Lake. Based on the typical elements of mobile home parks, 80S02983 is a standard mobile home park, which were commonly constructed throughout Florida and the United States post-World War II. Finally, 8OS02983 is not significant under Criterion D because it lacks the potential to yield further information of historical importance. Therefore, it is the opinion of SEARCH that Resource 8OS02983 is not eligible for listing in the NRHP.

CONCLUSION AND RECOMMENDATIONS

This report details the results of a CRAS conducted in support of proposed improvements to CR 525/Neptune Road in Osceola County, Florida. The project, being carried out by the Osceola County Department of Transportation and Transit, involves a 3.9-mile (6.3-kilometer) segment of Neptune Road extending from Partin Settlement Road to US 192 in Osceola County. The section east of the St. Cloud canal (approximately 1.1 miles [1.8 kilometers] in length) is within the City of St. Cloud. From Partin Settlement Road to Old Canoe Creek Road, the proposed project improves the existing two-lane roadway to a four-lane divided roadway with a curbed median and premium bicycle and pedestrian facilities (i.e., bike lanes, multiuse path(s), and/or sidewalks). From Old Canoe Creek Road to US 192, the project widens the existing two-lane roadway to four lanes with sidewalks. Bridge structures are to be replaced and stormwater management facilities will be evaluated. The bridge structures include one that crosses over Florida's Turnpike and the St. Cloud Canal, which is under the jurisdiction of SFWMD. No archaeological survey was conducted within the SFWMD canal; therefore, securing a permit was unnecessary. The roadway widening will require the acquisition of up to 191 feet (58.2 meters) of additional right-of-way, a total of 16.7 acres. The Neptune Road improvements project is currently being conducted using local funding administered by Osceola County and in

coordination with the FDOT, District 5. In anticipation of future federal involvement, the CRAS and other aspects of the PD&E study were carried out in accordance with the provisions of NEPA under which a Type 2 Categorical Exclusion will be sought.

The APE was defined to include the existing and proposed right-of-way and was extended to the back or side property lines of parcels adjacent to the right-of-way, or a distance of no more than 100 meters (328 feet) from the maximum right-of-way line. The archaeological survey was conducted within the existing and proposed right-of-way. The historic structure survey was conducted within the entire APE.

The archaeological survey consisted of a thorough pedestrian survey within the current and proposed project right-of-way, which included the excavation of 39 subsurface tests. Ground disturbance resulting from buried utilities and drainage features prevented subsurface archaeological testing throughout several portions the APE. Of the 39 excavated shovel tests, nine were positive for cultural material, resulting in the documentation of one new archaeological site, 80S02984. Site 80S02984 is recommended ineligible for the NRHP based on the level of disturbance and the unremarkable nature of the artifact assemblage.

The architectural survey resulted in the identification and evaluation of 40 historic resources within the Neptune Road APE, including two previously recorded resources and 38 newly recorded resources. The previously recorded resources include one historic canal (80S02752) and one historic railway (80S02822). The newly recorded resources include one historic mobile home park (80S02983); two historic canals (80S02981 and 80S02981); three historic bridges (80S02942-80S02944); and 32 historic structures (80S02945-80S02976).

One resource within the Neptune Road APE is NRHP-eligible. A segment of the St. Cloud Canal (80S02752) was determined NRHP-eligible by the SHPO on April 24, 2014. That segment of the St. Cloud Canal (80S02752) is considered significant under Criterion A for its association with land reclamation activities in Osceola County, which helped spur the development of the county, and Criterion C as an example of a nineteenth-century canal. Furthermore, SEARCH recommends the portion of the St. Cloud Canal (80S02752) within the Neptune Road APE locally significant under Criterion B for its association with Hamilton Disston, an important figure in Osceola County history. Based on the historic context and the results of the present survey, SEARCH recommends that the segment of the St. Cloud Canal (80S02752) within the Neptune Road APE eligible as contributing to the overall NRHP-eligible St. Cloud Canal (80S02752). A portion of the St. Cloud and Sugar Belt Railway (80S02822) was determined ineligible for the NRHP by SHPO on September 4, 2015. It is the opinion of SEARCH that the section of the St. Cloud and Sugar Belt Railway (80S02822) within the Neptune Road APE remains ineligible for the NRHP due to a lack of historic integrity. The remaining 38 historic resources within the Neptune Road APE are recommended ineligible due to a lack of historic significance.

Within the Neptune Road APE, the St. Cloud Canal (8OS02752) runs northeast-southwest for 0.12 miles (0.2 kilometers) between Florida's Turnpike (SR 91) and US 441 (SR 500) in Osceola County. Proposed improvements along the St. Cloud Canal (8OS02752) include the

reconstruction of the two-lane road into a four-lane divided roadway on a new bridge across the canal. In addition, the project proposes incorporating the existing Florida Trail, located to the north, into the new bridge and constructing a new trail to the southeast-southwest that will also cross the new bridge. The proposed bridge is 140 feet (42.7 meters) long by 105 feet (32 meters) wide and includes three bents to be placed into the canal. None of the proposed improvements, including the new road and bridge over the St. Cloud Canal (80S02752), will dramatically alter the integrity of the canal. Two bridges already span the canal within the Neptune Road APE, and they have not diminished the integrity of the canal. Based upon a review of the current plans, the proposed work will not involve rerouting of the canal, disruption of the canal, widening or loss of width, or the severing of the canal from other waterways. While the proposed project will acquire 0.3 acres within the St. Cloud Canal right-of way, none of the proposed improvements will diminish the integrity of the St. Cloud Canal (80S02752) or its ability to express the characteristics that make it eligible for listing on the NRHP. As, such, the proposed improvements will have no adverse effect on 80S02752. No further architectural work is recommended.

Based on the results of the CRAS, it is the opinion of SEARCH that the proposed Neptune Road improvements project will have no adverse effect on 8OS02752 or any other resources listed or eligible for listing in the NRHP. No further work is recommended.

REFERENCES CITED

Adovasio, J. M., J. Donahue, and R. Stuckenrath

1990 The Meadowcroft Rockshelter Radiocarbon Chronology 1975–1990. *American Antiquity* 55:348–355.

Akerman, Joe A., Jr.

1976 Florida Cowman: A History of Florida Cattle Raising. Florida Cattleman's Association, Kissimmee.

Anderson, David G., and Christopher Gillam

2000 Paleoindian Colonization of the Americas: Implications from an Examination of Physiography, Demography, and Artifact Distribution. *American Antiquity* 65(1):43–66.

Anderson, David G., D. Shane Miller, Stephen J. Yerka, J. Christopher Gillam, Erik N. Johanson, Derek T. Anderson, Albert C. Goodyear, and Ashley M. Smallwood

2010 PIDBA (Paleoindian Database of the Americas) 2010: Current Status and Findings. *Archaeology of Eastern North America* 38:63-90.

Archaeological Consultants, Inc.

- 1977 An Archaeological and Historical Survey of the 201 Facilities Plan Project, Kissimmee, St. Cloud, Osceola County. Florida Master Site File Survey No. 89. On file, Division of Historical Resources, Tallahassee, Florida.
- 2012 *The Historic Highway Bridges of Florida*. Florida Master Site File Survey No. 20057. On file, Florida Division of Historical Resources, Tallahassee.

Austin, Robert, and Howard Hansen

1988 Cultural Resource Assessment Survey of the Walker Ranch DRI Development Site, Polk and Osceola Counties, Florida. Prepared for Fischer and Associates, Inc. Piper Archaeological Research, Inc., St. Petersburg.

Bacon, Eve

1975 Orlando: A Centennial History. The Mickler House Publishers, Chuluota, FL.

Bennett, Charles E.

- 1964 Laudonnière and Fort Caroline. University of Florida Press, Gainesville.
- 1968 Settlement of Florida. University of Florida Press, Gainesville.
- 1975 Three Voyages: René Laudonnière. University Presses of Florida, Gainesville.

Blackman, William Fremont

1927 The History of Orange County, Narrative and Biographical. E.O. Painter Printing, Deland.

References Cited 70

Bradley, B., and D. Stanford

The North Atlantic Ice-edge Corridor: A Possible Palaeolithic Route to the New World. World Archaeology 34:459–478.

Brooks, H. K.

1981 *Guide to the Physiographic Divisions of Florida*. Florida Cooperative Extension Service, University of Florida, Gainesville.

Brown, Jr., Canter

1991 Tampa and the Coming of the Railroad, 1853-1884. *The Sunland Tribune*, Volume 17(1)(November).

Bullen, Ripley P.

1972 The Orange Period of Peninsular Florida. In *Fiber-tempered Pottery in Southeastern United States and Northern Columbia: Its Origins, Context, and Significance*, edited by R. P. Bullen and J. B. Stoltman, pp. 9–33. Florida Anthropological Society Publication 6. Gainesville.

Carney, Steve

2018 Architectural Spotlight: Midcentury modern, with its clean lines and simplicity, still has an edgy feel. LA Times. Electronic document, http://www.latimes.com/business/realestate/hot-property/la-fi-hp-architectural-spotlight-midcentury-modern-20180217-story.html, accessed August 2018.

Carswell, E. W.

1991 Washington: Florida's Twelfth County. Carswell, Chipley, FL.

Carter, Kevin, Garth Redfield, Matahel Ansar, Lawrence Glenn, Richard Huebner, John Maxted, Christopher Pettit and Joel Van Arman

2010 Canals in South Florida: A Technical Support Document. Electronic document, https://yosemite.epa.gov/sab/sabproduct.nsf/B5BFBC66CB336DAA852577F100823ED9 /\$File/Carter+email+with+attachments.pdf, accessed on July 2019

Christian Science Monitor

1918 Cattle Rising in Texas and Florida. 26 March

City of Miami

2017 Frame Vernacular (1840s–present). Electronic document, http://www.historicpreservationmiami.com/frame.html, accessed December 2017.

Clayton, Lawrence A., Vernon James Knight, Jr., and Edward C. Moore (editors)

1995 The De Soto Chronicles: The Expedition of Hernando de Soto to North America in 1539-1543. The University of Alabama Press, Tuscaloosa.

Coker, William S. and Susan R. Parker

1996 The Second Spanish Period in the Two Floridas. In *The New History of Florida*, edited by Michael Gannon. University Press of Florida, Gainesville.

Crow, Myrtle Hilliard

1987 *Old Tales and Trails of Florida*. Southern Heritage Press, St. Petersburg.

Deagan, Kathleen A.

1978 Cultures in Transition: Fusion and Assimilation Among the Eastern Timucua. In *Tacachale, Essays on the Indians of Florida and Southeastern Georgia During the Historic Period*, ed. by Jerald T. Milanich and Samuel Proctor, pp. 89-119. The University Presses of Florida, Gainesville.

Dickinson, Martin F. and Lucy B. Wayne

2015 Cultural Resource Survey Assessment, Judge Property Development Project, Osceola County, Florida. Florida Master Site File Survey No. 22162. On file, Florida Division of Historical Resources, Tallahassee.

Dillehay, T. D., C. Ramírez, M. Pino, M. B. Collins, J. Rossen, and J. D. Pino-Navarro

2008 Monte Verde: Seaweed, Food, Medicine, and the Peopling of South America. *Science* 320:784–786.

Dixon, E. J.

1993 *Quest for the Origins of the First Americans.* University of New Mexico Press, Albuquerque.

Drayton, Joseph

1827 A complete historical, chronological, and geographical American atlas. Carey and Lea, Philadelphia. Electronic document, http://fcit.usf.edu, accessed September 1, 2016.

Dovell, J. E.

1952 *Florida: Historic, Dramatic, Contemporary, Volumes 1 and 2.* Lewis Historical Publishing Company, New York.

Eng, Dinah

n.d. What is Midcentury Modern Architecture, Really? HGTV. Electronic document, https://www.hgtv.com/design/home-styles/all-about-mid-century-modern-architecture, accessed August 2018.

Fairbanks, George R.

1975 History and Antiquities of the City of St. Augustine, Florida. University Press of Florida, Gainesville.

References Cited 72

Faught, Michael K.

Archaeological Roots of Human Diversity in the New World: A Compilation of Accurate and Precise Radiocarbon Ages from Earliest Sites. *American Antiquity* 73(4):670–698.

Fernald, Edward A., and Elizabeth D. Purdum

1992 Atlas of Florida. University Press of Florida, Gainesville.

Fladmark, E. R.

1979 Routes: Alternative Migration Corridors for Early Man in North America. *American Antiquity* 44:55–69.

Florida Department of Agriculture

1927 Central Florida. Florida Department of Agriculture, Tallahassee.

Florida Department of Transportation (FDOT)

2017 OSC2017_264376_3in. Electronic document, https://fdotewp1.dot.state.fl.us/ AerialPhotoLookUpSystem/, accessed July, 2019.

Florida Memory

1900 Saint Cloud Canal Running Through the Disston Sugar Plantation-Saint Cloud, Florida. Electronic document, https://www.floridamemory.com/items/show/26416, accessed July, 2019.

Florida State Road Department (FSRD)

- 1917 Road Map, State of Florida. Electronic document, https://www.fdot.gov/geospatial/FloridaTransportationMapArchive.shtm, accessed July 24, 2019.
- 1926 Official Road Map of Florida. Electronic document, https://www.fdot.gov/geospatial/FloridaTransportationMapArchive.shtm, accessed July 24, 2019.
- 1939 Official Road Map of Florida. Electronic document, https://www.fdot.gov/geospatial/FloridaTransportationMapArchive.shtm, accessed July 24, 2019.

Gannon, Michael (editor)

- 1993 Florida: A Short History. University Press of Florida, Gainesville.
- 1996 The New History of Florida. University Press of Florida, Gainesville.

General Land Office (GLO)

- 1844 Survey Map of Township 26 South, Range 30 East. Electronic document, https://glorecords.blm.gov/, accessed July 22, 2019.
- 1848 Survey Map of Township 25 South, Range 30 East. Electronic document, https://glorecords.blm.gov/, accessed July 22, 2019.
- 1849a Survey Map of Township 25 South, Range 29 East. Electronic document, https://glorecords.blm.gov/, accessed July 22, 2019.
- 1849b Survey Map of Township 26 South, Range 29 East. Electronic document, https://glorecords.blm.gov/, accessed July 22, 2019.

Glassie, Henry

1990 Architects, Vernacular Traditions, and Society. *Traditional Dwellings and Settlements Review* 1(2):9-21. http://iaste.berkeley.edu/pdfs/01.2b-Spr90glassie-sml.pdf, accessed December 2018.

Goggin, John M.

1952 Space and Time Perspective in Northern St. Johns Archaeology, Florida. Yale University Publications in Anthropology 47. New Haven.

Griffin, James

1945 The Significance of the Fiber-Tempered Pottery of the St. Johns Area in Florida. *Journal of the Washington Academy of Sciences* 35:218–223.

Grismer, Karl H.

1949 The Story of Fort Myers: The History of the Land of the Caloosahatchee and Southwest Florida. St. Petersburg Printing Co., St. Petersburg.

Grunwald, Michael

2006 The Swamp: The Everglades, Florida, and the Politics of Paradise. Simon and Schuster, New York.

Halligan, Jessi J., M. R. Waters, A. Perrotti, I. J. Owens, J. M. Feinberg, M. D. Bourne, B. Fenerty, B. Winsborough, D. Carlson, D. C. Fisher, T. W. Stafford Jr., and J. S. Dunbar

2016 Pre-Clovis occupation 14,550 years ago at the Page-Ladson site, Florida, and the peopling of the Americas. Science Advances 2(5): e1600375

Hardin, Kenneth, Janice Ballo, and Mark Brooks

1984 Cultural Resource Assessment Survey of the Proposed Southport Sanitary Landfill Site, Osceola County, Florida. Submitted to Environmental Science and Engineering, Inc., Tampa. Piper Archaeological Research, Inc., St. Petersburg.

Hubka, Thomas C.

The American Ranch House: Traditional Design Method in Modern Popular Culture. Traditional Dwellings and Settlements Review 7(1):33–39. http://iaste.berkeley.edu/pdfs/07.1e-Fall95Hubka-sml.pdf, accessed February 2019.

Janus Corp.

2003 Cultural Resource Assessment Survey of Florida's Turnpike Mainline PD&E Study From US 192 to SR 50 (Clermont), Orange and Osceola Counties. Florida Master Site File Survey No. 9230. On file, Division of Historical Resources, Tallahassee, Florida.

Johnson, Dudley S.

1966 Henry Bradley Plant and Florida. Florida Historical Quarterly 45(2).

References Cited 74

Johnston, Sidney, and Barbara Mattick

2000 *Florida's Historic Railroad Resources*. Florida Master Site File Survey No. 6289. On file, Florida Division of Historical Resources, Tallahassee.

Jones, Ginny

2012 Guide to the Resource Group Form Version 5.0: Appendix E: Guidance on NR Eligibility of Canals. Electronic document, https://dos.myflorida.com/media/701769/guide_resourcegroup_v50.pdf, accessed July, 2019.

Knetsch, Joe

2018 Hamilton Disston and the Development of Florida. Sunland Tribune, Vol. 24.

Lawrence, Parker C.

2014 Home Sweet Mobile Home Park: Developing a Historic Context for a Modern Resource. Master's thesis, University of Georgia, Athens. Electronic document, https://getd.libs.uga.edu/pdfs/lawrence_parker_c_201408_mhp.pdf, accessed August 1, 2019.

Lawson, Sarah (translator)

1992 A Foothold in Florida: The Eyewitness Account of Four Voyages Made by the French to That Region and Their Attempt at Colonization, 1562–1568, Based on a New Translation of Laudonnière's L'Histoire Notable de la Florida. Antique Atlas Publications, East Grinstead, West Sussex, England.

Leod, Gordon M. and R. K. Murdock

1994 Florida's Railroads. Dinky Line, Apopka, Florida.

Light, Stephen S., and J. Walter Dineen

1994 Water Control in the Everglades: A Historical Perspective. In *Everglades: The Ecosystem* and Its Restoration, edited by Steven M. Davis and John C. Ogden, pp. 47–84. St. Lucie Press, Delray Beach, Florida.

Lyon, Eugene

1996 Settlement and Survival. In *The New History of Florida*, edited by Michael Gannon. University Press of Florida, Gainesville.

Mahon, John K.

1985 *History of the Second Seminole War, 1835–1842.* Rev. ed. University of Florida Press, Gainesville.

McAlester, Virginia

2013 A Field Guide to American Houses: The Definitive Guide to Identifying and Understanding America's Domestic Architecture. Alfred A. Knopf, New York.

Milanich, Jerald T.

1994 Archaeology of Precolumbian Florida. University Press of Florida, Gainesville.

1995 Florida Indians and the Invasion from Europe. University Press of Florida, Gainesville.

Milanich, Jerald T., and Charles Fairbanks

1980 Florida Archaeology. Academic Press, Orlando.

Miller, James A.

"The Fairest, Frutefullest and Pleaseantest of all the World": An Environmental History of the Northeast Part of Florida. PhD dissertation, University of Pennsylvania, Philadelphia.

Mohl, Raymond A., and Gary R. Mormino

1996 The Big Change in the Sunshine State: A Social History of Modern Florida. In *The New History of Florida*, edited by Michael Gannon, pp. 418–448. University Press of Florida, Gainesville.

Mormino, Gary

2005 Land of Sunshine, State of Dreams. University Press of Florida, Gainesville.

Morris, Allen

1995 Florida Place Names: Alachua to Zolfo Springs. Pineapple Press, Inc., Sarasota.

National Park Service (NPS)

2002 National Register Bulletin: Historic Residential Suburbs, Guidelines for Evaluation and Documentation for the National Register of Historic Places. US Department of the Interior, National Park Service, National Register of Historic Places. Electronic document, https://www.nps.gov/nr/publications/bulletins/pdfs/Suburbs.pdf, accessed February 2019.

Norton, Charles Ledyard

- 1890 Osceola County. In *A Handbook of Florida*. Longmans, Green, and Co., New York. Electronic document, https://fcit.usf.edu/florida/maps/, accessed July 24, 2019.
- 1892 A Handbook of Florida. Third Edition, Revised. Longmans, Green, & Co., NY.

Osceola County Centennial Book Committee

1987 Osceola County Centennial 1887-1987. Osceola County Centennial Book Committee, Kissimmee.

Osceola County Historical Society

2017 The History of Rail Transportation in Osceola County. Electronic document, http://blog.osceolahistory.org/the-history-of-rail-transportation-in-osceola-county, accessed July 25, 2019.

References Cited 76

Paisley, Clifton

1989 The Red Hills of Florida, 1528-1865. University of Alabama Press, Tuscaloosa.

Paleoindian Database of the Americas (PIDBA)

2018 Locational Database. Electronic document, http://pidba.utk.edu/database.htm, accessed November 13, 2018.

Panamerican Consultants, Inc.

2002 An Archaeological and Historical Survey of the Neptune Pointe Project Area in Osceola County, Florida. Florida Master Site File Survey No. 7076. On file, Division of Historical Resources, Tallahassee, Florida.

Partin & Partin Heart Bar Ranch

n.d. History. Electronic document, http://www.heartbarranch.com/history.html, accessed July 25, 2019.

Pettengill, George

1998 *The Story of the Florida Railroads 1834-1903.* The Railway and Locomotive Historical Society, Inc., Boston.

Porter, Tana Mosier, Cassandra Fyotek, Stephanie Gaub, Barbara Knowles, Garret Kremer Wright, and Cynthia Cardona Melendez

2009 *Historic Orange County: The Story of Orlando and Orange County.* Historical Publishing Network, San Antonio.

The Record Company

1935 Industrial Directory of Florida. The Record Company, St. Augustine.

R. Christopher Goodwin and Associates, Inc.

1993 Phase I Cultural Resources Investigation of the Proposed 30 IN O.D. Mainline Loop South Portion in the Florida Gas Transmission Company Phase III Expansion Project [Draft Report]. Florida Master Site File Survey No. 4383. On file, Division of Historical Resources, Tallahassee, Florida.

Reeves, F. Blair

1989 A Guide to Florida's Historic Architecture. University of Florida Press, Gainesville.

Richman-Abdou, Kelly

2017 Mid-Century Modern Homes that Shaped the Future of Architecture Design. Electronic document, https://mymodernmet.com/mid-century-modern-homes/, accessed August 2018.

Roberts, Robert B.

1988 Encyclopedia of Historic Forts: The Military, Pioneer, and Trading Posts of the United States. MacMillan Publishing Company, New York.

Robinson, Jim and Robert A. Fisk

2002 Images of America: St. Cloud. Arcadia Publishing, Charleston, SC.

Rohling, E. J., M. Fenton, F. J. Jorissen, P. Bertrant, G. Ganssen and J. P. Caulet 1998 Magnitudes of Sea-Level Lowstands of the Past 500,000 Years. *Nature* 394:162–165.

Sadowsky, Steve

n.d. Mid-Century Modern Architecture. Preservation Austin. Electronic document, https://www.preservationaustin.org/blog/mid-century-modern-architecture, accessed August 2018.

Salant, Katherine

The Ranch, an Architectural Archetype Forged on the Frontier. The Washington Post. Electronic document, http://www.washingtonpost.com/wp-dyn/content/article/2006/12/29/AR2006122900624_2.html, accessed February 2019.

Sassaman, Kenneth

1993 Early Pottery in the Southeast: Tradition and Innovation in Cooking Technology. The University of Alabama Press, Tuscaloosa.

Schafer, Daniel L.

1996 US Territory and State. In *The New History of Florida*, edited by Michael Gannon. University Press of Florida, Gainesville.

SEARCH

- 2007 A Phase I Cultural Resource Assessment Survey of Twenty-Four Proposed Pond Locations Along State Road 500 (US 192/US 441) Between Aeronautical Lane and Nova Road, Osceola County, Florida. Florida Master Site File Survey No. 14265. On file, Division of Historical Resources, Tallahassee, Florida.
- 2014 Cultural Resource Assessment Survey along State Road 500 from Aeronautical Drive to Budinger Road and from Eastern Avenue to Nova Road, Osceola County, Florida. Florida Master Site File Survey No. 20800. On file, Division of Historical Resources, Tallahassee, Florida.

Sears, William H.

1959 *Two Weeden Island Period Burial Mounds, Florida*. Contributions of the Florida State Museum, Social Sciences No. 5. Gainesville.

Smith, Bruce D.

1986 The Archaeology of the Eastern United States: From Dalton to de Soto, 10,500–500 B.P. Advances in World Archaeology 5:1–93.

Smith, James M., and Stanley C. Bond Jr.

1984 Stomping the Flatwoods: An Archaeological Survey of St. Johns County, Florida, Phase I. Historic St. Augustine Preservation Board, St. Augustine.

References Cited 78

South, Stanley

1977 Method and Theory in Historical Archaeology. Academic Press, Boston.

South Arc, Inc.

- 2004 Cultural Resources Survey Butler Ridge-Partin #2, Osceola County, Florida. Florida Master Site File Survey No. 11039. On file, Division of Historical Resources, Tallahassee, Florida.
- 2004 Cultural Resources Survey Partin Estate, Osceola County, Florida. Florida Master Site File Survey No. 11041. On file, Division of Historical Resources, Tallahassee, Florida.

Stiteler, Rowland

1986 The Last of the Cowboys Geech Partin and the Partin Clan are Kissimmee's Answer to the Ewings of 'Dallas.' They were Born and Bred on the Range. And Doubtless They'll Die There, Too. *Orlando Sentinel* 23 November.

Tebeau, Charlton W.

1971 A History of Florida. University of Miami Press, Coral Gables.

Thomas, David Hurst

1990 Columbian Consequences: Archaeological and Historical Perspectives on the Spanish Borderlands East, Vol. 2. Smithsonian Institute, Washington, DC.

Timberg, Scott

2005 The Once and Future Ranch. *Los Angeles Times*. 20 October 2005. Electronic document, http://www.latimes.com/local/la-hm-ranch20oct20-story.html, accessed February 2019.

US Department of Agriculture (USDA)

- 1944 Aerial Photographs of Osceola County, FL. Electronic document, https://ufdc.ufl.edu/aerials/map/, accessed July 22, 2019.
- 1959 Aerial Photographs of Osceola County, FL. Electronic document, https://ufdc.ufl.edu/aerials/map/, accessed August 1, 2019.

US Geological Survey (USGS)

- 1953 Topographic Map of St. Cloud North, FL. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/, accessed August 6, 2019.
- 1954a Topographic Map of St. Cloud North, FL. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/, accessed July 22, 2019.
- 1954b Topographic Map of St. Cloud South, FL. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/, accessed July 22, 2019.
- 1972a Topographic Map of St. Cloud North, FL. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/, accessed July 22, 2019.
- 1972b Topographic Map of St. Cloud South, FL. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/, accessed July 22, 2019.

Wallis, Allan D.

- 1989 House Trailers: Innovation and Accommodation in Vernacular Housing. *Perspectives in Vernacular Architecture* 3:28–43.
- 1991 Wheel Estate: The Rise and Decline of Mobile Homes. Johns Hopkins University Press, Baltimore.

Watts, W. A.

- 1969 A Pollen Diagram from Mud Lake, Marion County, North-Central Florida. *Geological Society of America Bulletin* 80:631–642.
- 1971 Postglacial and Interglacial Vegetation History of Southern Georgia and Central Florida. *Ecology* 52:676–690.
- 1975 A Late Quaternary Record of Vegetation from Lake Annie, South Central Florida. *Geology* 3:344–346.
- 1980 The Late Quaternary Vegetation History of the Southeastern United States. *Annual Reviews of Ecology and Systematics* 11:387–409.

Wickman, Patricia R.

1999 *The Tree that Bends: Discourse, Power, and the Survival of the Maskoki People.*University of Alabama Press, Tuscaloosa.

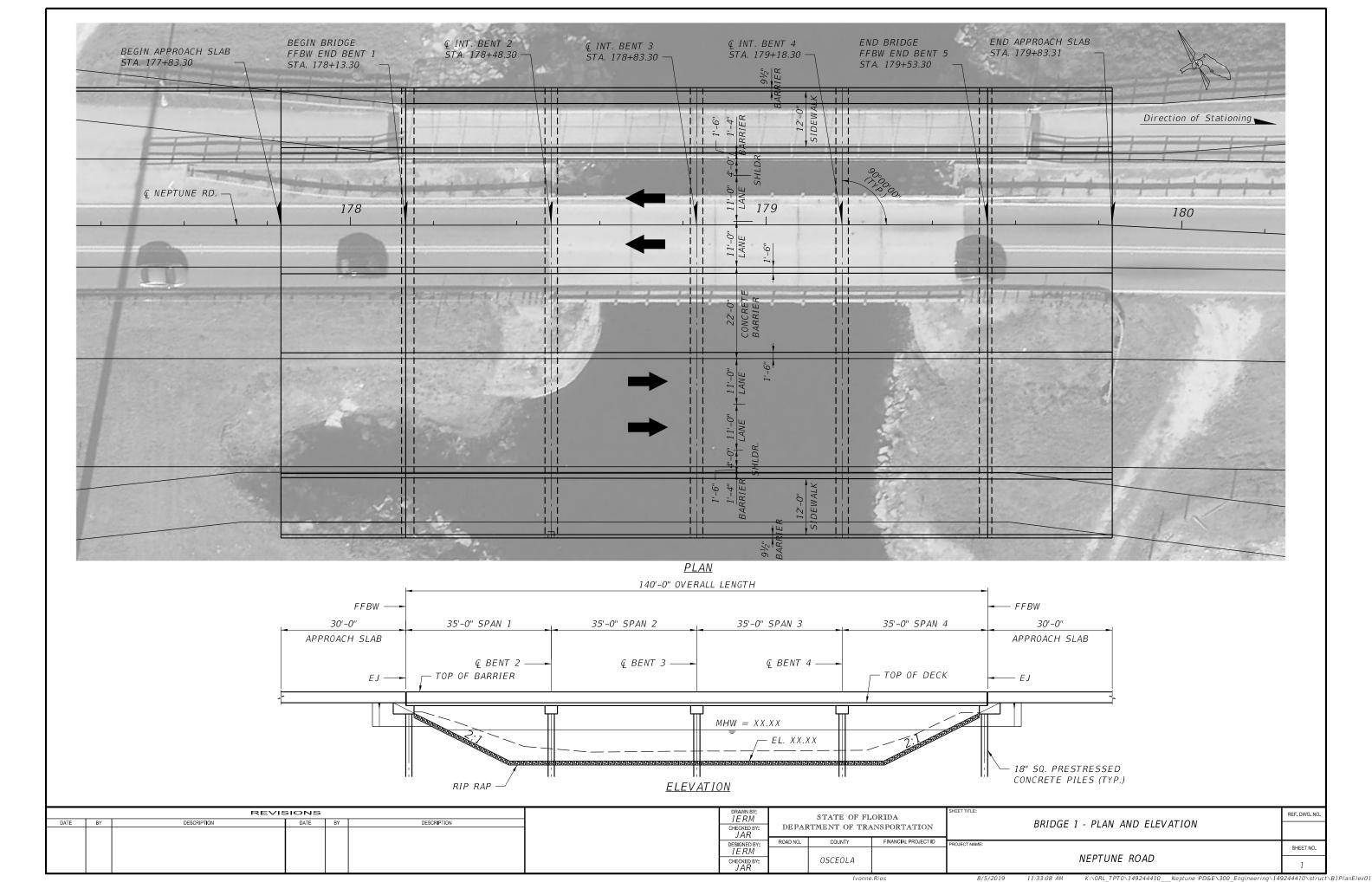
Wright, James Leitch

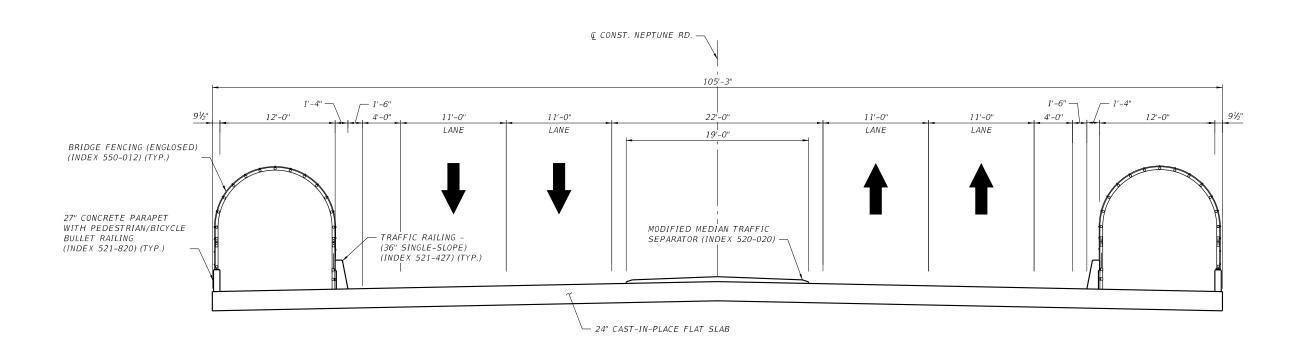
1975 British St. Augustine. Historic St. Augustine Preservation Board, St. Augustine.

References Cited 80

APPENDIX A.

BRIDGE PLANS





BRIDGE OVER SFWMD CANAL

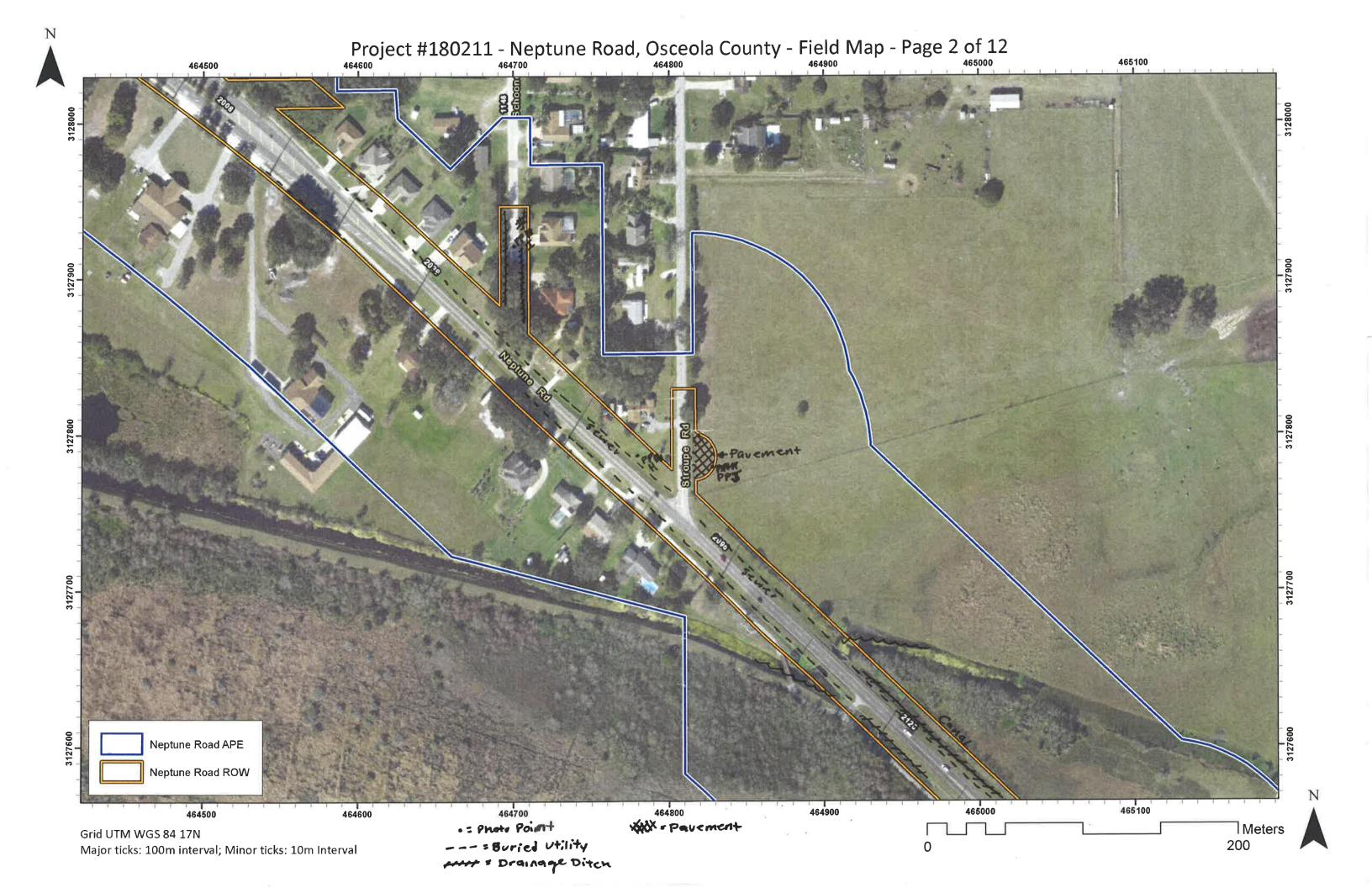
		REVI	SIONS	•		DRAWN BY: I E R M		STATE OF FL	ORIDA	SHEET TITLE:							
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	TYPICAL SECTION		DEPARTMENT OF TRANSPORTATION		12						YPICAL SECTION	
						JAR	DETTAL	KINDINI OF TIC	1101 OK17111014								
						DESIGNED BY:	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:							
						DESIGNED BY: IERM					NEDTUNE BOAR						
						CHECKED BY:		OSCEOLA			NEPTUNE ROAD						
						JAR											

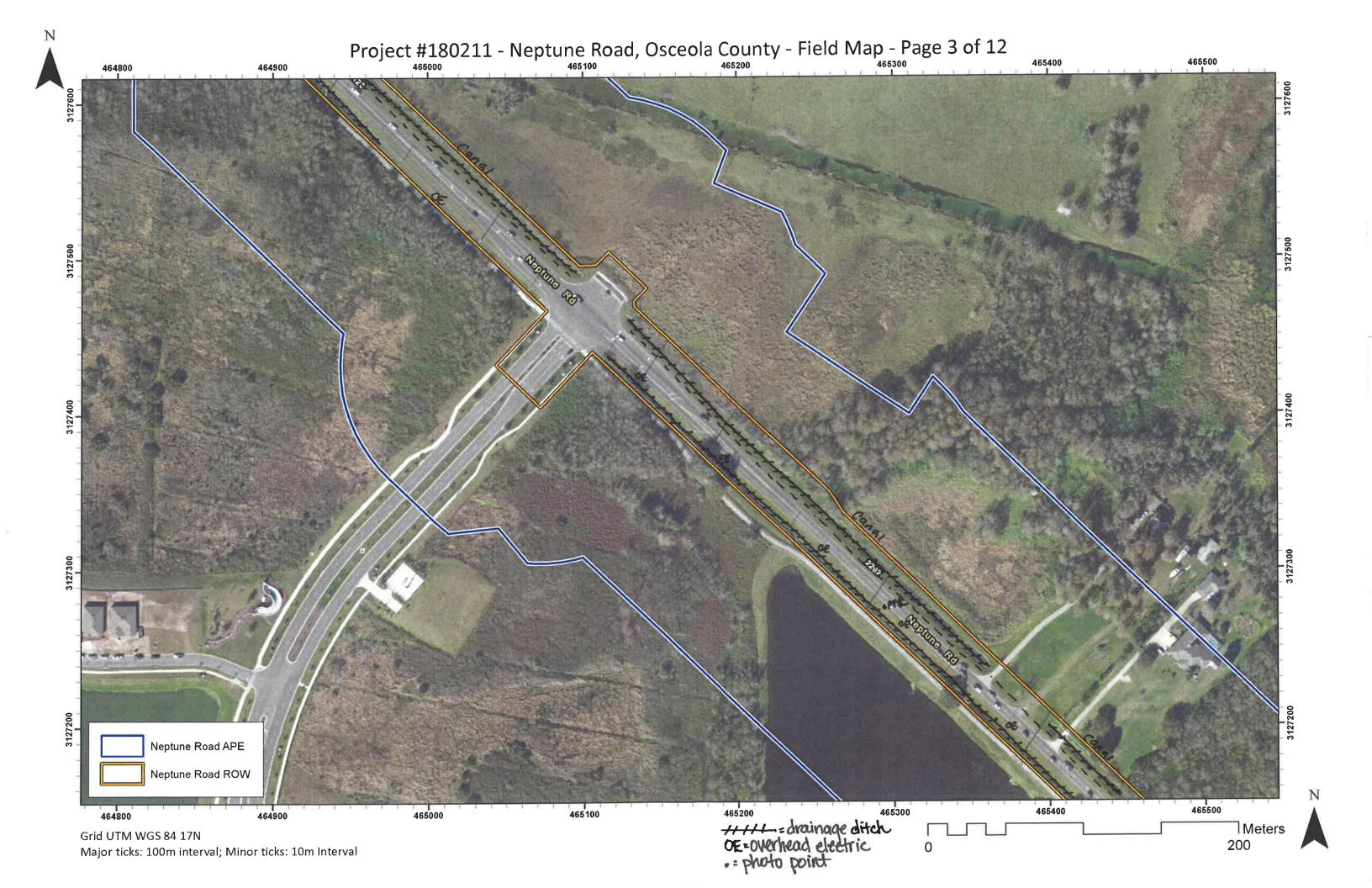
Vonne Rios 8/5/2019 1:35:56 PM K:\ORI TPTO\\149244410 Neptune PD&F\300 Engineering\\149244410\\struct\\typical

APPENDIX B.

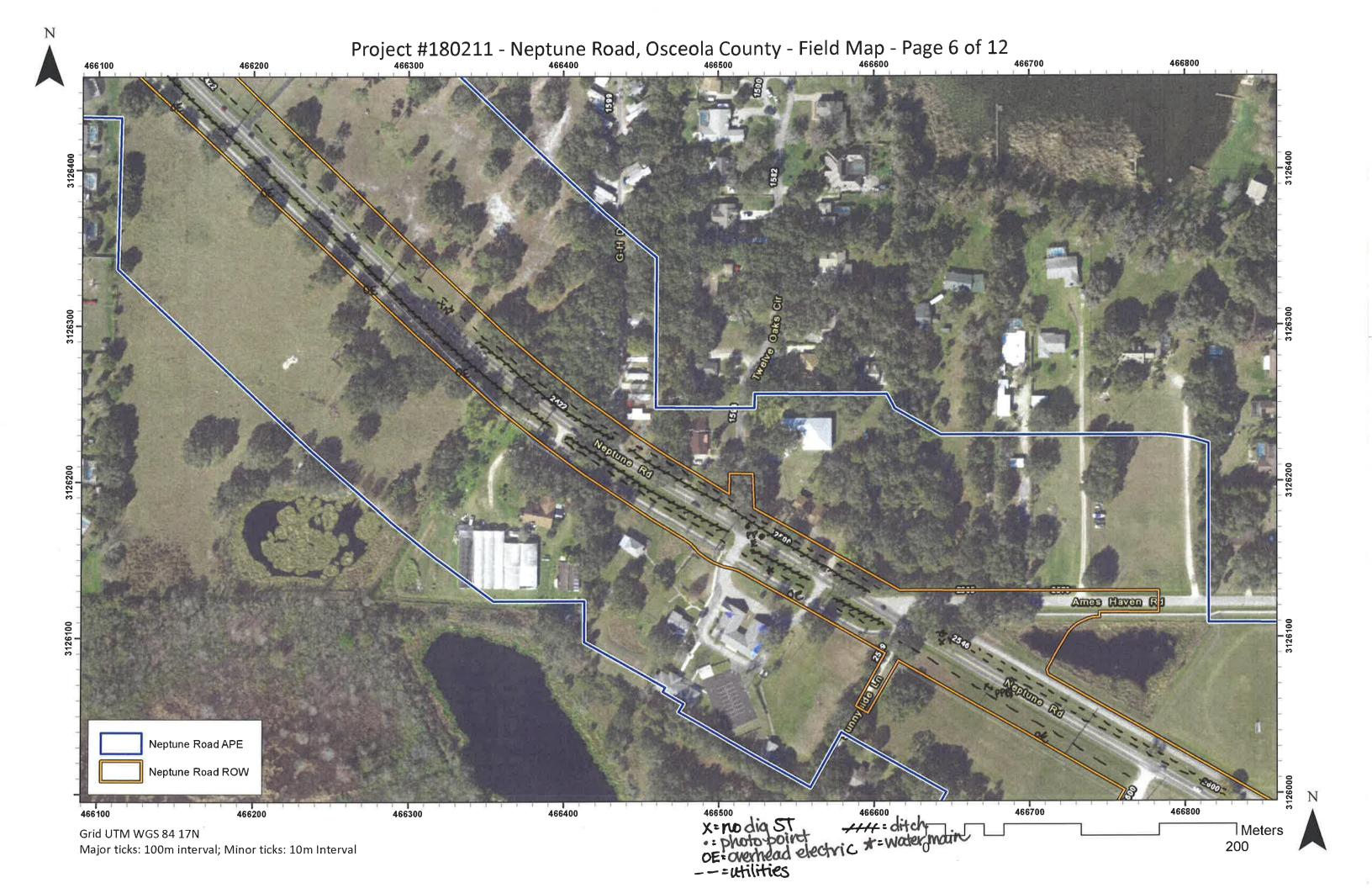
MARKED FIELD MAPS





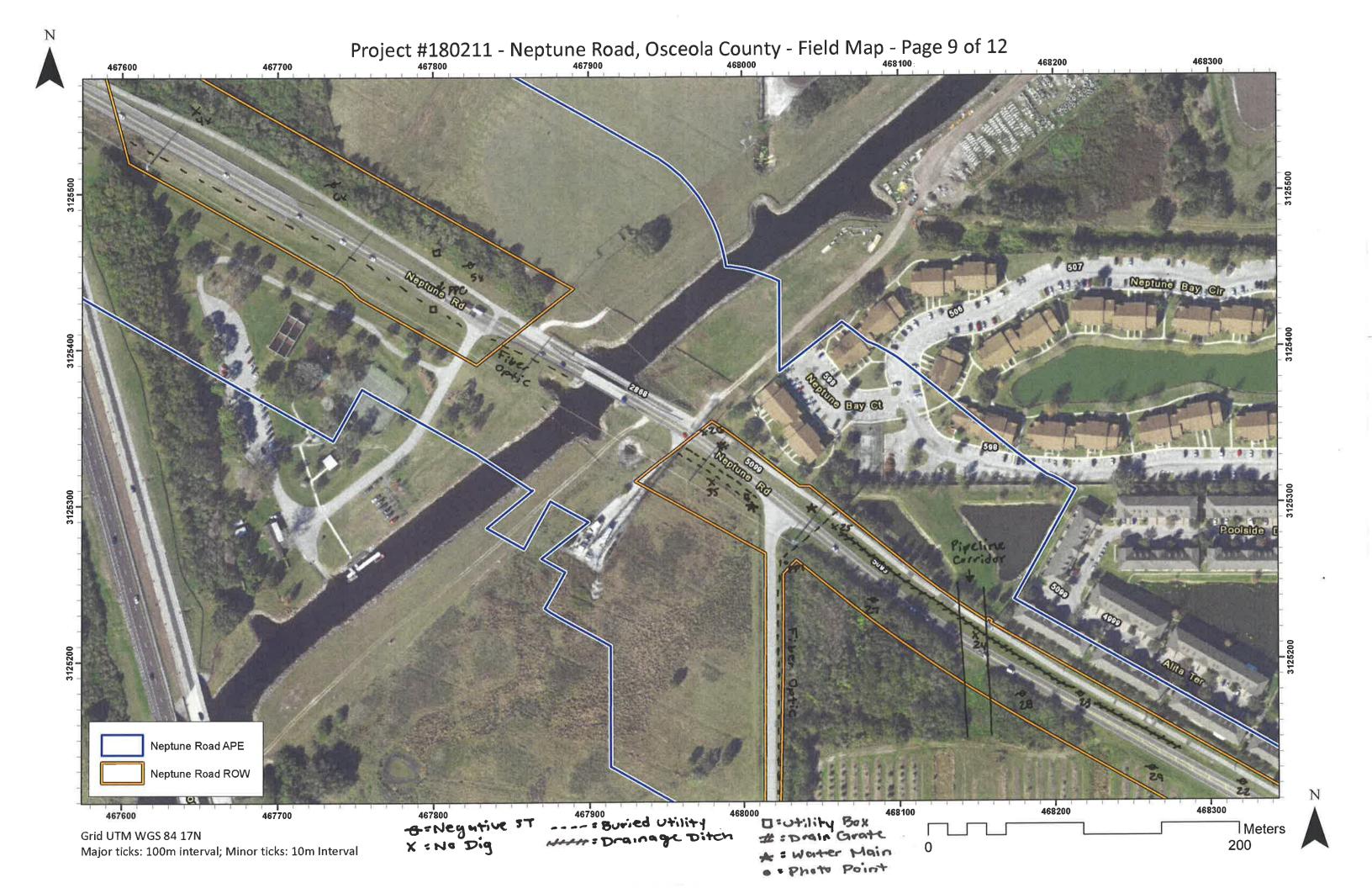


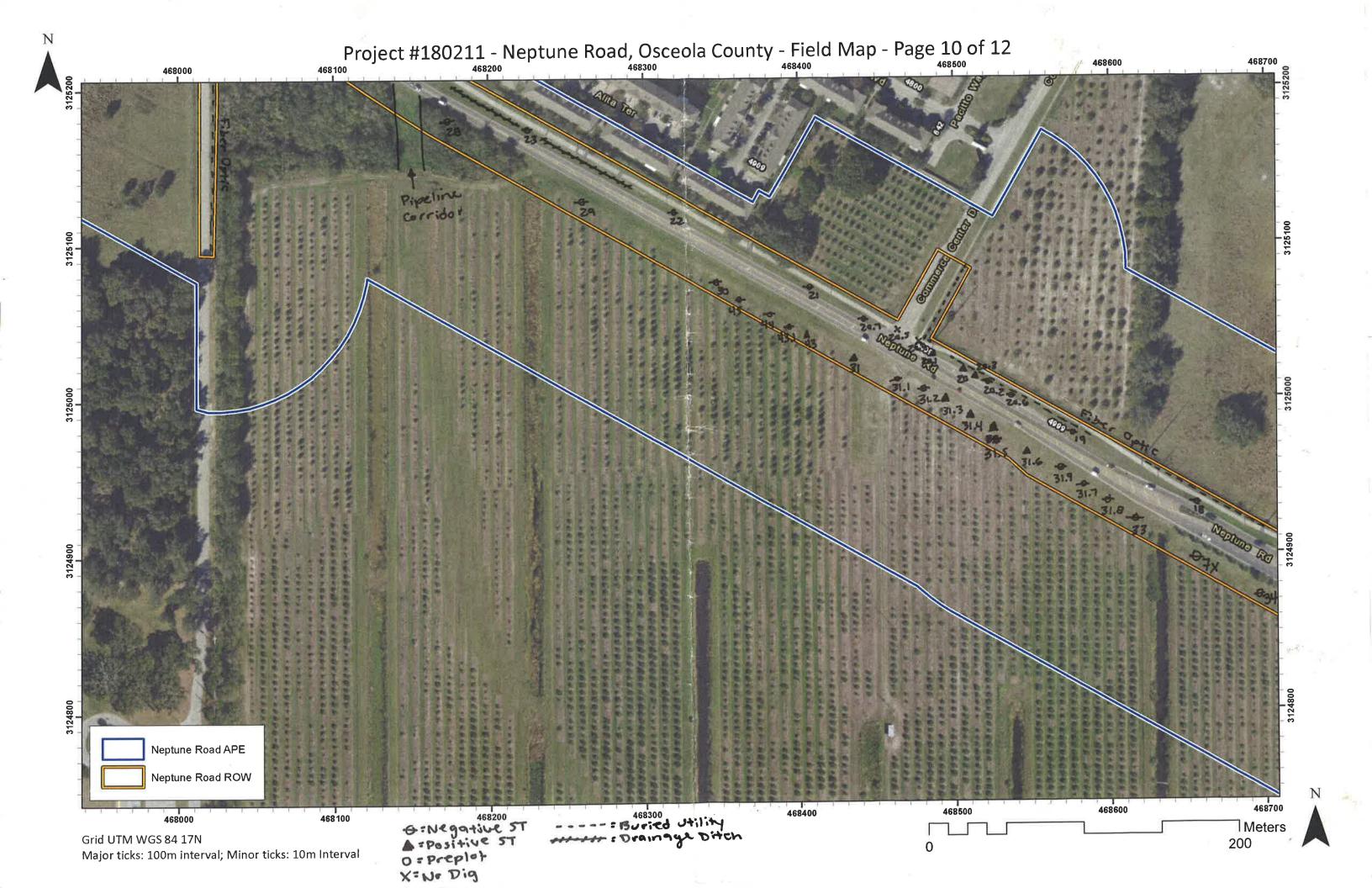


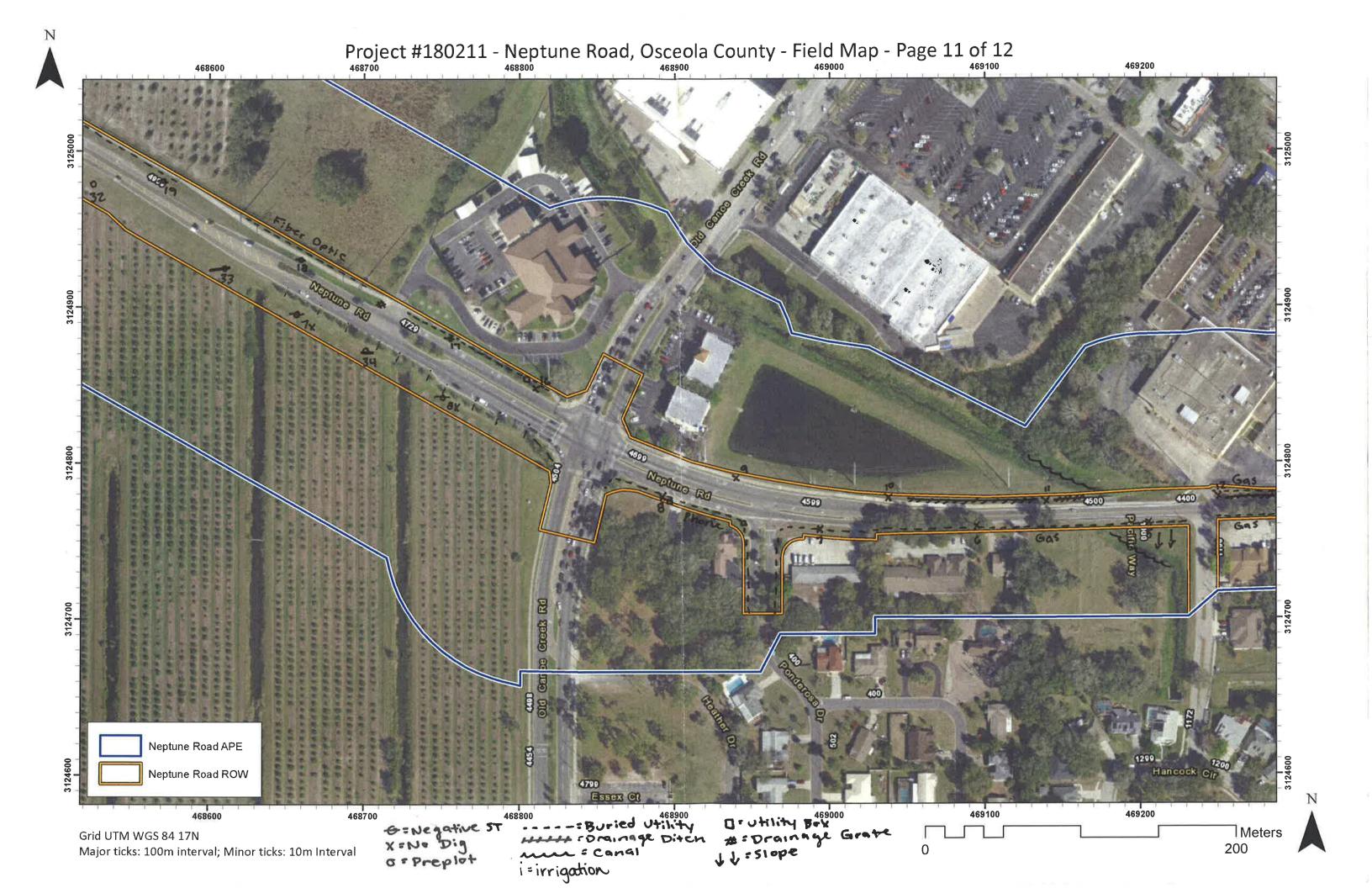








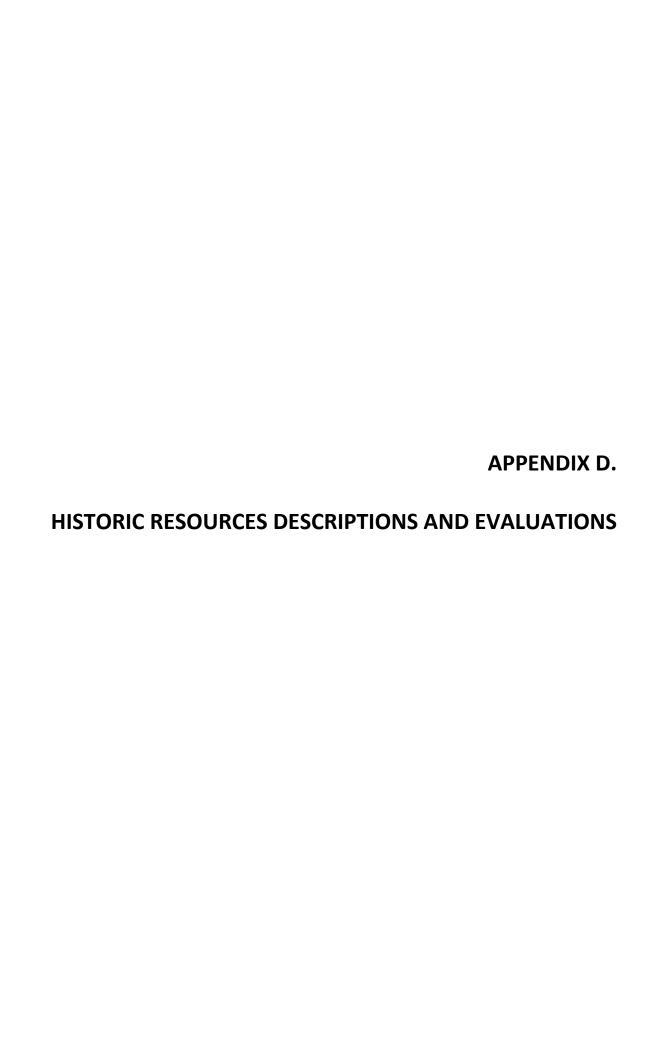




APPENDIX C.

FIELD SPECIMEN LOG

Site Number	FS#	LS#	Catalog#	ST#	Strata	Depth	Description	Count	Weight	Date Excavated	Exc/Rec	Start	Mean	End	Date Range
Poseidon 1	1	1	1.01	20	II	60-80	Porcelain, Decal; hollowware, body; red floral design	1	3.08	7/24/2019	CS/AC	1902			
Poseidon 1	2	2	2.01	20.1	Ш	60-80	Bottle glass, embossed; amethyst; embosed R	1	4.06	7/24/2019	AC/CS	1840		:	1880-1917
Poseidon 1	2	2	2.02	20.1	Ш	60-80	Bottle base; olive green	1	4.06	7/24/2019	AC/CS				
Poseidon 1	2	2	2.03	20.1	Ш	60-80	Refined earthenware, transfer printed, dark blue; hollowware, rim; small fragment; likely whiteware	1	0.55	7/24/2019	AC/CS	1802		1846	
Poseidon 1	2	2	2.04	20.1	Ш	60-80	Non-electrical wire; likely barbed wire	1	4.68	7/24/2019	AC/CS				
Poseidon 1	2	2	2.05	20.1	Ш	60-80	Flake; coastal plain chert; >1/2; Complete; 0% cortex	1	0.55	7/24/2019	AC/CS				
Poseidon 1	3	3	3.01	20.3	II	40-50	Bottle glass; amber	1	4.67	7/24/2019	AC/CS				
Poseidon 1	3	3	3.02	20.3	II	40-50	Nail, wire; fragment	2	3.80	7/24/2019	AC/CS	1865			
Poseidon 1	3	3	3.03	20.3	II	40-50	Whiteware; unknown, body; iron oxide staining	1	5.02	7/24/2019	AC/CS	1820			
Poseidon 1	4	4	4.01	31	II	30-40	Flake fragment; coastal plain chert, heat treated; Medial-Distal; Absent;	1	0.43	7/25/2019	AC/CS				
Poseidon 1	5	5	5.01	31	Ш	90-100	Animal bone; Bony Fish; likely fish maxilla	1	0.23	7/25/2019	AC/CS				
	6	6	6.01	31.3	II	20-40	Bottle glass; amber	2	6.22	8/1/2019	JG/SMB				
	6	6	6.02	31.3	II	20-40	Whiteware; flatware, rim	1	1.63	8/1/2019	JG/SMB	1820			
	6	6	6.03	31.3	II	20-40	Styrofoam	1	0.03	8/1/2019	JG/SMB	1962			
	6	6	6.04	31.3	II	20-40	Uid metal, non iron/steel; likely fragment of can	1	0.12	8/1/2019	JG/SMB				
	7	7	7.01	31.4	II	20-35	Flake fragment; coastal plain chert; Medial-Distal; Absent	1	0.57	8/1/2019	SMB/JG				
	7	7	7.02	31.4	II	20-35	Bottle glass; amber	1	0.88	8/1/2019	SMB/JG				
	8	8	8.01	31.5	I	0-30	Bottle glass; amber	14	17.63	8/1/2019	JG/SMB				
	8	8	8.02	31.5	I	0-30	Bottle glass, applied color label; amber; beer bottle	10	11.08	8/1/2019	JG/SMB	1935			
	8	8	8.03	31.5	I	0-30	Bottle glass, embossed; amber; likely Anheuser Busch	7	31.47	7 8/1/2019	JG/SMB	1840			
	8	8	8.04	31.5	I	0-30	Bottle base; amber	1	4.65	8/1/2019	JG/SMB				
	8	8	8.05	31.5	I	0-30	Bottle glass; dark green	1	2.40	8/1/2019	JG/SMB			:	1900-presen
	8	8	8.06	31.5	I	0-30	Bottle glass; clear	1	1.67	8/1/2019	JG/SMB				
	8	8	8.07	31.5	I	0-30	Very thin curved glass, globe or bottle; clear	1	0.18	8/1/2019	JG/SMB				
	8	8	8.08	31.5	I	0-30	Probable tableware; clear; molded starburst pattern	1	0.52	8/1/2019	JG/SMB				
	9	9	9.01	31.5	III	55-80	Bottle glass; amber	4	10.46	8/1/2019	JG/SMB				
	9	9	9.02			55-80	Bottle glass, applied color label; amber	1		8/1/2019	JG/SMB	1935			
	10	10	10.01	31.6	I	0-30	Bottle glass; clear	40	63.38	8/1/2019	SMB/JG				
	10	10	10.02	31.6	I	0-30	Bottle glass; amethyst	2	0.91	8/1/2019	SMB/JG			1	1880-1917
	10	10	10.03	31.6	ı	0-30	Bottle glass, screw cap; clear; includes metal cap and screw cap finish	2	20.90	8/1/2019	SMB/JG	1869			
	10	10	10.04	31.6	I	0-30	Uid foil; likely wrapper	1	0.06	8/1/2019	SMB/JG				
	10	10	10.05	31.6	ı	0-30	Uid metal, non iron/steel; likely fragment of can	1	0.33	1 8/1/2019	SMB/JG				
										.,,	,				
	10	10	10.06	31.6	ı	0-30	St Johns ceramic, indeterminate decoration; body; sponge spiculate; weathered; possible punctations on exterior	1	2.23	8/1/2019	SMB/JG				
	11	\rightarrow	11.01		II		Bottle glass; clear	1		7 8/2/2019	AC/SMB				
	11	_	11.02		II	50-65	Bottle glass; soda green	1		7 8/2/2019	AC/SMB				
	11	_	11.03		II		Whiteware; unknown, body	1		1 8/2/2019	AC/SMB	1820			
	11	_	11.04		П		Uid metal object; likely strap	1		8/2/2019	AC/SMB				



Historic Resources within the Project APE

8OS02752

Name: St. Cloud Canal

Original or Update: Update US Quad Map: ST. CLOUD NORTH (2018) TRS: 26S30E5

Built: ca. 1883

See Report for Description and Assessment

Individually Eligible: Contributing Resource: YES

Evaluation: 80S02752 is associated with Disston's reclamation activities in Osceola County and represents an example of a nineteenth century canal. It is the opinion of SEARCH that 8OS02752 remains NRHP-

eligible under Criterion A, B, and C.

80S02822

Name: St. Cloud and Sugar Belt Railway

US Quad Map: ST. CLOUD NORTH (2018)

Built: ca. 1888 TRS: 26S30E4

See Report for Description and Assessment

Individually Eligible: Contributing Resource: NO

NO

Evaluation: It is the opinion of SEARCH that 8OS02822 remains ineligible for listing in the NRHP as it lacks the historic integrity necessary to convey its significance under Criterion A. There is no historic fabric

remaining within the APE.

8OS02942

Name: Concrete Box Culvert and Weir

Original or Update: Original

Original or Update: Update

US Quad Map: ST. CLOUD NORTH (2018)

Built: ca. 1959 **TRS:** 25S30E31

See Report for Description and Assessment

Individually Eligible: NO

Evaluation: Due to lack of sufficient historic significance and engineering distinction, 80S02942 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

Contributing Resource: NO

Historic Resources within the Project APE

8OS02943

Name: Neptune Road Bridge over FL Turnpike

Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018)

See Report for Description and Assessment

Individually Eligible: Contributing Resource: NO

Evaluation: Due to lack of sufficient historic significance and engineering distinction, 8OS02943 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

Original or Update: Original

80S02944

Name: Neptune Road Bridge over St. Cloud Canal

US Quad Map: ST. CLOUD NORTH (2018)

TRS: 26S30E5

Built: ca. 1957

Built: ca. 1963

TRS: 26S30E5

See Report for Description and Assessment

Individually Eligible:

Contributing Resource: NO

NO

Evaluation: Due to lack of sufficient historic significance and engineering distinction, 8OS02944 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

district.

Original or Update: Original

80S02945

Name: 1194 Struope Road

Built: ca. 1965

Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Wood frame

Style: Frame Vernacular

Additions and Alterations:

Plan: Irregular

US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S29E25 Relocated: NO

Accessibility ramp to entries

Exterior Fabric: Wood siding Stories: 1 Chimneys: 0

Foundation: Piers

Foundation Material: Concrete Block **Roof Material:** Composition shingles Roof: Cross-gabled Main Entry: This building features two six panel vinyl doors on the south façade.

Porch(es): This building features a full width porch on the south façade where the roof line extends. The roof is supported by six metal poles and the porch is accessible by concrete steps or a ramp.

Windows: SHS/vinyl/individual/ 8/8 and fixed/metal/rectangular

Distinguishing Features: This building features an H shape design connecting the house and garage, a full width

porch on the south façade, and an accessibility ramp.

Ancillary Features: This building features two non-historic sheds to the west, and a paved driveway.

Individually Eligible:

NO

Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02945 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

Contributing Resource: NO

Historic Resources within the Project APE Built: ca. 1935 Name: 2317 Neptune Road Building 1 8OS02946 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E31 Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Wood frame Relocated: NO Style: Frame Vernacular Exterior Fabric: Wood siding Stories: 1 Plan: Rectangular Additions and Alterations: Small addition to the northeast corner; Updated door Chimneys: 0 Foundation Material: Concrete Block Foundation: Piers Roof: Gable/Shed Roof Material: Sheet metal:3V crimp Main Entry: This building features a paneled vinyl door with a security door on the south facade. Porch(es): This building features a full width porch on the south façade with a shed roof. The roof is supported by four wood posts. Windows: DHS/wood/paired and individual/ 4/1 Distinguishing Features: This building feature horizontal wood siding, exposed rafter tails, and wood frame Ancillary Features: This building features a historic outbuilding to the northeast (80S02947) **Individually Eligible:** Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02947 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** Name: 2317 Neptune Road Building 2 Built: ca. 1935 80S02947 TRS: 25S30F31 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) Relocated: NO Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Wood frame Exterior Fabric: Wood siding Stories: 1 Style: Frame Vernacular Plan: Rectangular Additions and Alterations: Chimnevs: 0 Updated door Foundation: Continuous Foundation Material: Poured Concrete Footing Roof: Gable/Shed Roof Material: Sheet metal:3V crimp Main Entry: This building features a metal door on the west facade featuring louvers. Porch(es): N/A Windows: DHS/wood/3 grouped/ 3/1 Distinguishing Features: This building features horizonal wood siding, and wood frame windows Ancillary Features: This building features a historic structure (80S02946) to the southwest, and a chain link fence to the north. **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02946 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 2345 Neptune Road Built: ca. 1949 80502948 Original or Update: Original TRS: 25S30E31 US Quad Map: ST. CLOUD NORTH (2018) Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Concrete block Relocated: NO Style: Masonry Vernacular Plan: Rectangular Exterior Fabric: Concrete block, Stucco Stories: 1 Additions and Alterations: Updated windows, doors Chimneys: 0 Foundation Material: Concrete Block Foundation: Continuous Roof: Gable **Roof Material:** Composition shingles Main Entry: This building features a vinyl paneled door on the south façade. Porch(es): N/A Windows: DHS/vinyl/paired/6/6

Distinguishing Features: This building features a concrete block and stucco exterior and gable end vents.

Ancillary Features: This building features several large trees, a paved drive way, and a chain link fence all to the south.

Individually Eligible: NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02948 is ineligible for

listing in the NRHP, either individually or as a contributing resource within a potential or existing historic Contributing Resource: NO

Historic Resources within the Project APE Built: ca. 1970 Name: 2357 Neptune Road 8OS02949 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E31 Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Concrete block Relocated: NO **Exterior Fabric: Stucco** Stories: 1 Style: Masonry Vernacular Plan: Rectangular **Additions and Alterations:** Updated windows Chimneys: 0 Foundation Material: Concrete Block Foundation: Continuous Roof: Cross-gabled **Roof Material:** Composition shingles Main Entry: This building features a protected entry on the south façade. The entry is behind a metal gate with a co Porch(es): N/A Windows: SHS/metal/individual/ 8/8; there are decorative shutters Distinguishing Features: This building features a cross gable roof, and a protected main entry. **Ancillary Features:** This building features a paved driveway and a brick mailbox to the south. **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02949 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 2363 Neptune Road Built: ca. 1953 80S02950 Original or Update: Original TRS: 25S30F31 US Quad Map: ST. CLOUD NORTH (2018) Relocated: NO Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Wood frame Stories: 1 Style: Frame Vernacular Plan: L-shaped **Exterior Fabric:** Fiberglass Additions and Alterations: Updated windows, door Chimnevs: 0 Foundation: Piers Foundation Material: Concrete Block Roof: Cross-gabled **Roof Material:** Composition shingles Main Entry: This building features a six paneled vinyl door on the south façade. Porch(es): N/A Windows: SHS/vinyl/individual/ 1/1 **Distinguishing Features:** This building features a cross gable roof and gable end vents. Ancillary Features: This building features a paved driveway to the west. **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02950 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 2369 Neptune Road Built: ca. 1957 8OS02951 Original or Update: Original TRS: 25S30E31 US Quad Map: ST. CLOUD NORTH (2018) Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Concrete block Relocated: NO Style: Ranch Plan: Rectangular **Exterior Fabric:** Concrete block, Vinyl Stories: 1 **Additions and Alterations:** Updated windows and door Chimneys: 0 Foundation: Continuous Foundation Material: Concrete Block Roof: Gable **Roof Material:** Composition shingles Main Entry: This building features a vinyl and glass door on the south façade. Porch(es): On the south façade, the gable roof line extends to create a covered entryway. The extended roof line is supported by four Doric columns. Windows: SHS/vinyl/groups of 3/ single panes; decorative shutters Distinguishing Features: This building features decorative shutters, vinyl siding in gable ends, and Doric columns.

Individually Eligible: NO Evaluation: Due to lack of sufficient historic significance and architectur

Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02951 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

Ancillary Features: This building features a paved driveway to the east and west.

Contributing Resource: NO distri

Historic Resources within the Project APE Built: ca. 1955 Name: 2375 Neptune Road 8OS02952 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E31 Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Brick Relocated: NO Exterior Fabric: Brick Stories: 1 Style: Masonry Vernacular Plan: Irregular Additions and Alterations: Updated windows and doors Chimnevs: 0 Foundation Material: Concrete Block Foundation: Continuous Roof: Gable **Roof Material:** Composition shingles Main Entry: This building features two vinyl doors on the south façade. One is flush, the other has six panels. Porch(es): N/A Windows: SHS/vinyl/pairs/ 4/4 **Distinguishing Features:** This building features a to car carport on the southwest corner. Ancillary Features: This building features a paved driveway to the west. **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8SO02952 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 2381 Neptune Road Built: ca. 1968 80S02953 Original or Update: Original TRS: 25S30F31 US Quad Map: ST. CLOUD NORTH (2018) Relocated: NO Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Brick Stories: 1 Style: Ranch Plan: Rectangular Exterior Fabric: Brick Additions and Alterations: Addition to the northeast; Updated windows and doors Chimnevs: 1 Foundation: Continuous Foundation Material: Concrete Block Roof: Gable **Roof Material:** Composition shingles Main Entry: This building features a vinyl door with an oval light on the south façade. Porch(es): This building features a partial width porch on the south façade created by the overhanging roof line. The porch has a small metal wall with a gate painted white. Windows: SHS/vinyl/individual/ 1/1; near the main entry is a set of SHS/vinyl/ 1/1, with a vinyl picture window between them as a group. Decorative shutters Distinguishing Features: This building features a brick planter box under the southeast window, a brick chimney, and a partial width porch. **Ancillary Features:** This building features a paved driveway along the west and curved on the south. **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02953 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 2393 Neptune Road Built: ca. 1948 8OS02954 Original or Update: Original TRS: 25S30E31 US Quad Map: ST. CLOUD NORTH (2018) Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Concrete block Relocated: NO Exterior Fabric: Stucco Style: Masonry Vernacular Plan: Rectangular Stories: 1 Additions and Alterations: Updated windows and doors Chimneys: 0 Foundation Material: Concrete Block Foundation: Continuous Roof: Hip/Shed Roof Material: Sheet metal: 3V crimp

Main Entry: This building features a vinyl and glass door on the south façade.

Porch(es): This building features a full width porch on the south façade with a shed roof. The roof is supported by

six wood columns.

Windows: SHS/vinyl/individual and pairs/ 1/1

Distinguishing Features: This building features a hip dormer with a vent, full width porch,

Ancillary Features: This building features a fence to the south and west, and a paved drive to the south.

Individually Eligible: NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02954 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic Contributing Resource: NO

Historic Resources within the Project APE Built: ca. 1971 Name: 2405 Neptune Road 8OS02955 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E31 Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Concrete block Relocated: NO Exterior Fabric: Concrete block Stories: 1 Style: Ranch Plan: Rectangular Additions and Alterations: Updated windows Chimneys: 1 Foundation Material: Concrete Block Foundation: Continuous Roof: Gable **Roof Material:** Composition shingles Main Entry: The main entry is not visible from the ROW, but is most likely on the eastern façade. Porch(es): N/A Windows: SHS/vinyl/pairs and groups of 3/2/2 Distinguishing Features: This building features a concrete block chimney to the west, a gable roof, and a long and low rectangular plan. Ancillary Features: This building features a paved driveway to the east and a concrete block half wall to the Individually Eligible: Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02955 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 2411 Neptune Road Built: ca. 1972 80S02956 Original or Update: Original TRS: 25S30F31 US Quad Map: ST. CLOUD NORTH (2018) Relocated: NO Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Concrete block Exterior Fabric: Concrete block Stories: 1 Style: Mid-Century Modern Plan: Rectangular Additions and Alterations: Updated windows and doors Chimnevs: 1 Foundation Material: Concrete Block Foundation: Continuous Roof: Gable **Roof Material:** Composition roll Main Entry: This building features a vinyl door with a large oval light on the south façade. Porch(es): N/A Windows: SHS and fixed/individual, pairs, and a group of 3/1/1 Distinguishing Features: This building features a central brick chimney, a low pitched gable roof, and an attached carport. **Ancillary Features:** This building features a gravel driveway and a wood post fence to the south. **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02956 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 2415 Neptune Road Built: ca. 1972 8OS02957 Original or Update: Original TRS: 25S30E31 US Quad Map: ST. CLOUD NORTH (2018) Original Use: Private Residence (House Present Use: Private Residence (House Structural System: Concrete block Relocated: NO Exterior Fabric: Stucco Style: Masonry Vernacular Plan: Rectangular Stories: 1 Additions and Alterations: Updated windows and door Chimneys: 1 Foundation Material: Concrete Block Foundation: Continuous Roof: Gable **Roof Material:** Composition shingles Main Entry: This building features vinyl French doors with a central leaded light on the south façade. Porch(es): A secondary gable roof provides a protected entry on the south façade. The roof is supported by two Doric columns. Windows: SHS/vinyl/individual and pairs/ 6/6 **Distinguishing Features:** This building features a stucco chimney, a gable roof, and fluted quoins. **Ancillary Features:** This building features a dirt driveway to the south.

Individually Eligible: NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02957 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic district.

Historic Resources within the Project APE Built: ca. 1961 Name: 1501 G&H Drive Building 1 8OS02958 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E32 Original Use: Office Present Use: Office Structural System: Concrete block Relocated: NO Exterior Fabric: Concrete block, Vinyl Stories: 1 Style: Masonry Vernacular Plan: Rectangular Additions and Alterations: Updated windows and doors Chimneys: 0 Foundation: Continuous Foundation Material: Concrete Block Roof: Gable **Roof Material:** Composition shingles Main Entry: This building features a nine panel vinyl door on the east façade with a nameplate inscribed with office. Porch(es): This building features a partial width porch on the south façade created by the extended roof. The roof is supported by one wood post in the southeast corner. Windows: SHS/vinyl/individual/ 1/1 Distinguishing Features: This building features a partial width porch to the south, has a gable roof, and vinyl siding in gable ends. Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983) and serves as the Mobile Home Park's office. **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02958 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** Name: 1501 G&H Drive Building 2 Built: ca. 1961 80S02959 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25530F32 Relocated: NO Original Use: Outbuilding Present Use: Outbuilding Structural System: Concrete block Exterior Fabric: Concrete block, Vinyl Stories: 1 Style: Masonry Vernacular Plan: Rectangular Additions and Alterations: Updated door Chimnevs: 0 Foundation: Continuous Foundation Material: Concrete Block Roof: Gable **Roof Material:** Composition shingles Main Entry: This building features a vinyl paneled door on the north façade. Porch(es): N/A Windows: jalousie/metal/individual; this building features only two windows Distinguishing Features: This building features a gable roof, painted concrete block exterior and painted vinyl siding in gable ends. Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983) and is the outbuilding for **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02959 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 1501 G&H Drive Mobile Home 1 Built: ca. 1970 8OS02960 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E32 Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton Relocated: NO Original Use: Mobile Home/Trailer Ho Style: Mobile Home Plan: Rectangular Exterior Fabric: Metal, Concrete block Stories: 1 Additions and Alterations: Concrete block addition & shed roof; Chimneys: 0 Foundation: Continuous Foundation Material: Concrete Block Roof: Gable/Shed Roof Material: Sheet metal: 3V crimp Main Entry: This building features a metal door with a four light awning window on the south façade. Porch(es): This building features a shed roof extending from the Mobile Home providing a protected main entry. The roof is supported by three decorative metal columns. Windows: SHS/metal/individual/ 1/1 and awning/metal/3 light; one window has a metal awning. Distinguishing Features: This building is a mobile home. This building features an attached concrete block addition to the south and a shed roof protecting the main entry.

Individually Eligible: NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02960 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic district.

Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983).

Historic Resources within the Project APE Built: ca. 1970 Name: 1501 G&H Drive Mobile Home 2 8OS02961 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E32 Original Use: Mobile Home/Trailer Ho Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton Relocated: NO **Exterior Fabric: Metal** Stories: 1 Style: Mobile Home Plan: Rectangular Additions and Alterations: Shed roof carport to south; Lattice work placed over doors & window Chimneys: 0 Foundation: Piers Foundation Material: Concrete Block Roof: Gable/Shed **Roof Material:** Sheet metal:standing seam Main Entry: The main entry is located on the south façade within the enclosed addition. The addition features a me Porch(es): N/A Windows: SHS/metal/individual/ 1/1 Distinguishing Features: This building is a Mobile Home. This building features a shed roof addition to the south which includes an enclosed area and a carport. Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983). Individually Eligible: Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02961 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** Name: 1501 G&H Drive Mobile Home 3 Built: ca. 1970 80S02962 TRS: 25530F32 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) Relocated: NO Original Use: Mobile Home/Trailer Ho Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton Exterior Fabric: Metal, Vinyl Stories: 1 Style: Mobile Home Plan: Rectangular Shed roof addition to the south; Additions and Alterations: Chimnevs: 0 Foundation: Piers Foundation Material: Concrete Block Roof: Gable/Shed **Roof Material:** Sheet metal:standing seam Main Entry: This building features a flush metal door on the south façade. Porch(es): This building features a shed roof addition on the south façade providing a protected entry. The roof is supported by six wood posts. Windows: SHS/metal/individual/ 1/1; SHS/metal/group of 3, bay/ 1/1 on the east façade. One window has a metal awning Distinguishing Features: This building is a Mobile Home. This building features a shed roof addition to the south, and on the east façade is vinyl siding. Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983) **Individually Eligible:** NO **Evaluation:** Due to lack of sufficient historic significance and architectural distinction, 80S02962 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 1501 G&H Drive Mobile Home 4 Built: ca. 1970 8OS02963 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E32 Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton Relocated: NO Original Use: Mobile Home/Trailer Ho Stories: 1 Style: Mobile Home Plan: Rectangular **Exterior Fabric: Metal** Additions and Alterations: Shed roof addition to the south; Chimneys: 0 Foundation Material: Concrete Block Foundation: Piers Roof: Gable/Shed Roof Material: Sheet metal: 3V crimp Main Entry: This building features a metal door on the south side within the screen patio. Porch(es): N/A Windows: SHS/metal/individual and pairs/ 1/1 /decorative shutters. One has a metal awning. Distinguishing Features: This building is a Mobile Home. This building features a shed roof addition with a

screened patio on the south side.

Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983).

Individually Eligible: NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02963 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic Contributing Resource: NO

Historic Resources within the Project APE Built: ca. 1970 Name: 1501 G&H Drive Mobile Home 5 8OS02964 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E32 Original Use: Mobile Home/Trailer Ho Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton Relocated: NO **Exterior Fabric: Metal** Stories: 1 Style: Mobile Home Plan: Rectangular Additions and Alterations: Enclosed patio to the south; Chimneys: 0 Foundation Material: Concrete Block Foundation: Piers Roof: Gable/Shed Roof Material: Sheet metal: 3V crimp Main Entry: The main entry is located on the south façade within the enclosed addition. **Porch(es):** An addition to the south provides a screened in porch. **Windows:** Jalousie/metal/individual and pairs/decorative shutters Distinguishing Features: This building is a Mobile Home. It features an enclosed patio addition on the south. Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983). **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02964 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** Name: 1501 G&H Drive Mobile Home 6 Built: ca. 1970 80S02965 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25530F32 Relocated: NO Original Use: Mobile Home/Trailer Ho Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton **Exterior Fabric: Metal** Stories: 1 Style: Mobile Home Plan: Rectangular Additions and Alterations: Enclosed porch on the north; Chimnevs: 0 Foundation: Piers Foundation Material: Concrete Block **Roof Material:** Sheet metal:standing seam Roof: Gable/Shed Main Entry: The main entry is located on the north façade within the enclosed addition. **Porch(es):** An addition to the north provides a screened in porch. Windows: awning/metal/individual and a group of 3/2 lights/decorative shutters and metal awnings **Distinguishing Features:** This building is a Mobile Home. It features an enclosed patio addition to the north. Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983). **Individually Eligible:** NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02965 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 1501 G&H Drive Mobile Home 7 Built: ca. 1970 8OS02966 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E32 Original Use: Mobile Home/Trailer Ho Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton Relocated: NO **Exterior Fabric:** Metal Style: Mobile Home Plan: Rectangular Stories: 1 Additions and Alterations: Shed roof addition to the north; Chimneys: 0 Foundation Material: Concrete Block Foundation: Piers Roof: Gable/Shed Roof Material: Sheet metal: 3V crimp Main Entry: This building features a metal door with a diamond light on the north façade. Porch(es): This building features a shed roof addition to the north façade providing a protected entry. The roof is supported by two metal posts. Windows: SHS and awning/metal/individual/ 1/1 and 2 lights Distinguishing Features: This building is a Mobile Home. It features a shed roof addition to the north. Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983).

Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02966 is ineligible for

listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

Individually Eligible:

Contributing Resource: NO

NO

Historic Resources within the Project APE Built: ca. 1970 Name: 1501 G&H Drive Mobile Home 8 8OS02967 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E32 Original Use: Mobile Home/Trailer Ho Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton Relocated: NO **Exterior Fabric: Metal** Stories: 1 Style: Mobile Home Plan: Rectangular Additions and Alterations: Shed roof addition to the north; Updated some windows Chimneys: 0 Foundation Material: Concrete Block Foundation: Piers Roof: Flat/Shed Roof Material: Sheet metal: 3V crimp Main Entry: The main entry is located on the north façade within the enclosed addition. **Porch(es):** An addition to the north provides a screened in porch Windows: SHS/metal/individual/ 1/1, SHS/vinyl/group of 3/1/1, 1 fixed metal, and 1 sliding/metal/2 lights. Several windows have metal awnings. Distinguishing Features: This building is a Mobile Home. It features an enclosed patio with a shed roof on the north side and surrounding the windows the siding is painted. Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983). **Individually Eligible:** Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02967 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** Name: 1501 G&H Drive Mobile Home 9 Built: ca. 1969 80S02968 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25530F32 Relocated: NO Original Use: Mobile Home/Trailer Ho Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton **Exterior Fabric: Metal** Stories: 1 Style: Mobile Home Plan: Rectangular Additions and Alterations: Updated door Chimnevs: 0 Foundation: Piers Foundation Material: Concrete Block Roof Material: Sheet metal:standing seam Roof: Gable Main Entry: This building features a metal frame sliding glass door as the main entry on the north façade. Porch(es): N/A Windows: SHS/metal/individual and a group of 3/1/1; metal awnings and decorative shutters Distinguishing Features: This building is a Mobile Home. It features a sliding glass door main entry and concrete steps on the north façade leading to the main entry. Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983). **Individually Eligible:** NO **Evaluation:** Due to lack of sufficient historic significance and architectural distinction, 80S02968 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic **Contributing Resource: NO** district. Name: 1501 G&H Drive Mobile Home 10 Built: ca. 1969 8OS02969 Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E32 Original Use: Mobile Home/Trailer Ho Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton Relocated: NO Style: Mobile Home Plan: Rectangular Exterior Fabric: Metal, Vertical plank Stories: 1 Additions and Alterations: Shed roof additions to the north; Updated some windows Chimneys: 0 Foundation: Piers Foundation Material: Concrete Block Roof: Gable/Shed Roof Material: Sheet metal: 3V crimp Main Entry: The main entry is located on the north façade within the enclosed addition. Porch(es): N/A Windows: awning/metal/individual/3 lights, SHS/metal/individual/ 1/1, and SHS/vinyl/individual/ 4/4 Distinguishing Features: This building is a Mobile Home. It features two enclosed additions to the north with shed roofs with vinyl and vertical wood siding.

Individually Eligible: NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02969 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic district.

Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983).

8OS02970

Name: 1501 G&H Drive Mobile Home 11

Built: ca. 1969

TRS: 25S30E32

Original Use: Mobile Home/Trailer Ho

Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) Present Use: Mobile Home/Trailer Ho Structural System: Metal skeleton

Historic Resources within the Project APE

Relocated: NO

Style: Mobile Home **Additions and Alterations:**

Exterior Fabric: Metal Stories: 1 Plan: Rectangular Shed roof addition to the north; Updated some windows and doors Chimnevs: 0

Foundation: Piers Foundation Material: Concrete Block Roof: Gable/Shed Roof Material: Sheet metal: 3V crimp

Main Entry: This building features a six panel vinyl door on the west façade located on the north addition.

Porch(es): N/A

Windows: SHS/vinyl/individual/ 1/1, SHS/vinyl/group of 4/ 1/1, awning/metal/group of 3/3 lights, awning/metal/

group of 3/4lights; decorative shutters

Distinguishing Features: This building is a Mobile Home. It features a shed roof enclosed addition to the north.

Ancillary Features: This building is part of the G and H Mobile Home Park (80S02983).

Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02970 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

Original or Update: Original

80S02971

Name: 2534 Neptune Road Building 1

Built: ca. 1925

Original Use: Private Residence (House Present Use: Church/Cemetery Compl Structural System: Wood frame

US Quad Map: ST. CLOUD NORTH (2018)

TRS: 25530F32

Style: Frame Vernacular **Additions and Alterations:** Plan: Square

Exterior Fabric: Shiplap

Relocated: YES Stories: 1 Chimnevs: 0

Accessibility ramp added to east façade; Updated windows and doors Foundation: Piers Foundation Material: Brick

Roof: Hip/Gable **Roof Material:** Composition shingles

Main Entry: This building features a nine panel vinyl door on the east façade. The central panel has a rectangular lig Porch(es): This building features a small gable roof supported by two wood posts providing a protected main entry

on the east facade.

Windows: SHS/metal/individual/ 6/6 and 1/1

Distinguishing Features: This building features an accessibility ramp on the east facade, and a shed roof on the

west façade which may be an addition prior to moving.

Ancillary Features: This building features a historic building (80S02972) and a non-historic structure to the west.

Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02971 is ineligible for

Individually Eligible:

NO

listing in the NRHP, either individually or as a contributing resource within a potential or existing historic district.

Contributing Resource: NO 8OS02972

Name: 2534 Neptune Road Building 2

Built: ca. 1969

Original Use: Agricultural

Present Use: Church/Cemetery Compl Structural System: Concrete block

Original or Update: Original

US Quad Map: ST. CLOUD NORTH (2018) TRS: 26S30E5

Style: Masonry Vernacular

Relocated: NO Exterior Fabric: Concrete block Stories: 1

Plan: U-shaped

Chimneys: 0

Additions and Alterations: Updated windows and doors

> Foundation Material: Concrete Block Foundation: Continuous Roof: Cross-gabled **Roof Material:** Composition shingles

Main Entry: This building features a metal door with a rectangular light on the west façade.

Porch(es): N/A

Windows: SHS/vinyl/individual and groups of 3/1/1; some windows appear to horizontal sliding windows.

Distinguishing Features: This building features a cross gables roof, U-shaped plan, and round gable end vents.

Ancillary Features: This building features a historic structure (80S02971) and a non-historic structure to the west

Individually Eligible: NO Contributing Resource: NO

Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02972 is ineligible for

listing in the NRHP, either individually or as a contributing resource within a potential or existing historic















	Historic Resources with	in the Project APE	
00002072	Name: 2545 Neptune Road	1	Built: ca. 1955
8OS02973	Original or Update: Original	US Quad Map: ST. CLOUD NORTH (2018)	TRS: 25S30E32
Original Use: Private Residence (Hous Style: Masonry Vernacular Additions and Alterations:	Present Use: Private Residence (House Plan: Rectangular Updated windows and doors Foundation: Continuous	se Structural System: Concrete block Exterior Fabric: Stucco Foundation Material: Concrete Block	Relocated: NO Stories: 1 Chimneys: 0
	Porch(es): This building features a par by six wood posts and prov Windows: SHS/vinyl/individual/ one 1 Distinguishing Features: This build the west f	Roof Material: Composition shingles nyl door on the south façade with an large oval light. tial width porch on the south façade with a shed roof. ides a protected entry. /1 and the remaining are 8/8; there is a sliding glass ding features a partial width porch on the south façade façade, and decorative quoins. tures a dirt driveway and there are several trees surro	oor on the west façade. , a sliding glass door on
Individually Eligible: NO Contributing Resource: NO	listing in the NRHP, either district.	storic significance and architectural distinction, 8OS02 individually or as a contributing resource within a pot	ential or existing historic
8OS02974	Name: 1649 Breezewood S	treet	Built: ca. 1926
00302374	Original or Update: Original	US Quad Map: ST. CLOUD NORTH (2018)	TRS: 26S30E5
Original Use: Private Residence (Hous Style: Masonry Vernacular Additions and Alterations:	Present Use: Private Residence (House Plan: Rectangular Additions to the south and east; Updated Foundation: Continuous Roof: Gable/Shed Main Entry: This building features a si Porch(es): This building features an er	Exterior Fabric: Concrete block, Brick windows and doors Foundation Material: Concrete Block Roof Material: Composition shingles	Relocated: NO Stories: 1 Chimneys: 1
	separator. Distinguishing Features: This build a brick ch	irs/ 1/1; the pairs are located on the north façade wit ing features an enclosed porch on the south façade ar imney on the west façade. tures a non-historic shed to the southwest and a pave	nd the lower portion of
Individually Eligible: NO Contributing Resource: NO		storic significance and architectural distinction, 8OSO2 individually or as a contributing resource within a pot	
9050207E	Name: 4601 Neptune Road	1	Built: ca. 1932
8OS02975	Original or Update: Original	US Quad Map: ST. CLOUD SOUTH (2018)	TRS: 26S30E4
Original Use: Private Residence (Hous Style: Masonry Vernacular Additions and Alterations:	Plan: L-shaped Additions to the south and west; Updated		Relocated: NO Stories: 2 Chimneys: 1
	six columns.	Foundation Material: Concrete Block Roof Material: Sheet metal: 3V crimp width porch with a shed roof on the north façade. The ixed/vinyl/individual/rectangular and square, awning/	
		ing features additions to the west and south that are a and gable dormers to the north and south.	clad with stucco, a brick

Individually Eligible: NO Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02975 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic district.

north.

Ancillary Features: This building features an asphalt parking lot to the south and west, and a sidewalk along the

80S02976

Name: 4125 Neptune Road

Original or Update: Original

Built: ca. 1962

Original Use: Private Residence (House Present Use: Commercial

Structural System: Wood frame

US Quad Map: ST. CLOUD SOUTH (2018)

TRS: 26S30E4

Style: Frame Vernacular Additions and Alterations: Plan: Rectangular **Exterior Fabric: Vinyl** Addition to north; Updated windows and door

Historic Resources within the Project APE

Relocated: NO Stories: 1 Chimneys: 0



Main Entry: This building features a modern commercial metal and glass door on the east side.

Porch(es): N/A

Windows: fixed/metal/individual/single pane; the window is covered with an advertising poster and has decorative

Distinguishing Features: This building features three roof types and has a commercial front.

Ancillary Features: This building features an asphalt parking lot to the north and west, and a chain link fence to

the east.

Individually Eligible:

Evaluation: Due to lack of sufficient historic significance and architectural distinction, 8OS02976 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

80S02981

Contributing Resource: NO

Name: Peg Horn Slough Canal

Built:pre-1944 TRS: 26S30E04

TRS: 25S30E31

Original or Update: Original US Quad Map: ST. CLOUD SOUTH (2018)

See Report for Description and Assessment

Individually Eligible: Contributing Resource: NO

NO

Evaluation: Due to lack of sufficient historic significance and engineering distinction, 8OS02981 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

district.

80S02982

Name: Partin Canal

Built:pre-1944

Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018)

See Report for Description and Assessment

Individually Eligible:

NO

Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02982 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

Contributing Resource: NO

Historic Resources within the Project APE

8OS02983

Name: G and H Mobile Home Park

Original or Update: Original US Quad Map: ST. CLOUD NORTH (2018) TRS: 25S30E32

Built: ca. 1962

See Report for Description and Assessment

Individually Eligible:

NO

Evaluation: Due to lack of sufficient historic significance and architectural distinction, 80S02983 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic

Contributing Resource: NO

APPENDIX E.

FMSF RESOURCE FORMS (ON ATTACHED CD)

APPENDIX F.

FDHR SURVEY LOG SHEET

Ent D (FMSF only)	
	3

Survey Log Sheet

Survey # (FMSF only)

Florida Master Site File Version 5.0 3/19

Consult Guide to the Survey Log Sheet for detailed instructions.

	Manuscript Information		
Survey Project (name and project phase)			
CRAS of Neptune Road Widening Project	ct, Osceola County, Florida		
B (Till ()			
Report Title (exactly as on title page)		17711	
Cultural Resource Assessment Survey Settlement Road to US 192, Osceola (ad Widening Project from Part	ın
Report Authors (as on title page) 1. RabbyS	mith, Steven	3. Travisano, Mikel	
2. Dye, M	elissa	4. Nowak, Matt	
Publication Year <u>2019</u> Number of	Pages in Report (do not include site forms)	80	
Publication Information (Give series, number in series	s, publisher and city. For article or chapter, cit	e page numbers. Use the style of <i>American An</i>	tiquity.)
on file at SEARCH, Newberry. SEARCH PS-18-9906-DG	Project No. 180211; Financia	l Project Identification No.	
Supervisors of Fieldwork (even if same as author)	Names Chambless, Elizabeth		
Affiliation of Fieldworkers: Organization Southeas		City Pensacola	
Key Words/Phrases (Don't use county name, or comm			
		7. 80S02945-80S0297	5
2. 80S02984 4. 80S02822		802944 8.	
Survey Sponsors (corporation, government unit, orgar Name Address/Phone/E-mail Jacksonville, Flo	Organization Kimley-Hor		
Recorder of Log Sheet Nowak, Matt		Date Log Sheet Completed 8-7-2	019
Is this survey or project a continuation of a prev	vious project? ⊠No □Yes: P re	vious survey #s (FMSF only)	
	Project Area Mapping	_	
Counties (select every county in which field survey was 1. Osceola 3. 2. 4.	, , , , , , ,	5. 6.	
USGS 1:24,000 Map Names/Year of Latest Rev	vision (attach additional sheet if necessary)		
1. Name LAKE TOHOPEKALIGA	Year 2018 4. Name ST. CI	LOUD SOUTH Year	2018
2. Name KISSIMMEE	Year 2018 5. Name	Year_	
3. Name ST. CLOUD NORTH	Year 2018 6. Name	Year_	
Fie	ld Dates and Project Area Descript	ion	
Fieldwork Dates: Start 7-22-2019 End Number of Distinct Tracts or Areas Surveyed If Corridor (fill in one for each) Width: 45	1	h: _6.30 kilometers _ 3.90 mi	acres

Page 2 Survey Log Sheet Survey #____

	Resear	ch and Field Metho	ds		
Types of Survey (select all that apply):	⊠archaeological	⊠architectural	⊠historical/archival	□underwater	
	damage assessment	monitoring report	other(describe):		
Scope/Intensity/Procedures	•				
Subsurface testing at 100-	-meter intervals. F	Recording histor	ic structures 45 y	ears or older.	
Florida Photo Archives (Gray Building) Site File property search	as apply to the project as a library research- local public library-special collection Public Lands Survey (maps at llocal informant(s)	⊠local property □newspaper file	s ⊠soils map ch □windshie	os or data other remote sensing	
Archaeological Methods (select as m Check here if NO archaeological methomsurface collection, controlled surface collection, uncontrolled shovel test-1/4"screen shovel test-1/8" screen shovel test 1/16"screen other (describe):		re block soil r magr side grou	excavation (at least 2x2 m) esistivity netometer scan sonar nd penetrating radar (GPR) R	□metal detector □other remote sensing ☑pedestrian survey □unknown	
Historical/Architectural Methods (s Check here if NO historical/architectural building permits commercial permits interior documentation other (describe):		□neigł □occu	obor interview pant interview pation permits	□subdivision maps □tax records □unknown	
Survey Results					
Resource Significance Evaluated? Count of Previously Recorded Resolute Previously Recorded Site ID#s 80S02390, 80S01844, 80S017	⊠Yes □No ources5 s with Site File Forms Com	Count of New		39	
List Newly Recorded Site ID#s (att 80S02942-80S02976, 80S0298		sary)			
Site Forms Used: ☐Site File P	aper Forms ⊠Site Fi	le PDF Forms			
REQUIRED: Attach Map of Survey or Project Area Boundary					
SHPO USE ONLY	5	SHPO USE ONLY		SHPO USE ONLY	

SHPO USE ONLY	SHPO USE ONLY	SHPO USE ONLY			
O rigin of Report: □872 □Public Lands □UW	□1A32 # □	□Academic □Contract □Avocational			
Grant Project # Compliance Review: CRAT #					
Type of Document: ☐Archaeological Survey ☐His	torical/Architectural Survey Marine Survey C	ell Tower CRAS Monitoring Report			
□Overview □Excavation Report □Multi-Site Excavation Report □Structure Detailed Report □Library, Hist. or Archival Doc					
□Desktop Analysis □MPS	MRA □TG □Other:				
Document Destination: Plottable Projects	Plotability:				

