APPENDIX J

Wood Stork Effect Determination Key

United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960

May 18, 2010

Donnie Kinard
Chief, Regulatory Division
Jacksonville District Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32232-0019

Service Federal Activity Code: 41420-2007-FA-1494
Service Consultation Code: 41420-2007-I-0964
Subject: South Florida Programmatic Concurrence
Species: Wood Stork

Dear Mr. Kinard:

This letter addresses minor errors identified in our January 25, 2010, wood stork key and as such, supplants the previous key. The key criteria and wood stork biomass foraging assessment methodology have not been affected by these minor revisions.

The Fish and Wildlife Service's (Service) South Florida Ecological Services Office (SFESO) and the U.S. Army Corps of Engineers Jacksonville District (Corps) have been working together to streamline the consultation process for federally listed species associated with the Corps' wetland permitting program. The Service provided letters to the Corps dated March 23, 2007, and October 18, 2007, in response to a request for a multi-county programmatic concurrence with a criteria-based determination of "may affect, not likely to adversely affect" (NLAA) for the threatened eastern indigo snake (*Drymarchon corais couperi*) and the endangered wood stork (*Mycteria americana*) for projects involving freshwater wetland impacts within specified Florida counties. In our letters, we provided effect determination keys for these two federally listed species, with specific criteria for the Service to concur with a determination of NLAA.

The Service has revisited these keys recently and believes new information provides cause to revise these keys. Specifically, the new information relates to foraging efficiencies and prey base assessments for the wood stork and permitting requirements for the eastern indigo snake. This letter addresses the wood stork key and is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 *et seq.*). The eastern indigo snake key will be provided in a separate letter.

Wood stork

Habitat

The wood stork is primarily associated with freshwater and estuarine habitats that are used for nesting, roosting, and foraging. Wood storks typically construct their nests in medium to tall

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trees that occur in stands located either in swamps or on islands surrounded by relatively broad expanses of open water (Ogden 1991, 1996; Rodgers et al. 1996). Successful colonies are those that have limited human disturbance and low exposure to land-based predators. Nesting colonies protected from land-based predators are characterized as those surrounded by large expanses of open water or where the nest trees are inundated at the onset of nesting and remain inundated throughout most of the breeding cycle. These colonies have water depths between 0.9 and 1.5 meters (3 and 5 feet) during the breeding season.

Successful nesting generally involves combinations of average or above-average rainfall during the summer rainy season and an absence of unusually rainy or cold weather during the winter-spring breeding season (Kahl 1964; Rodgers et al. 1987). This pattern produces widespread and prolonged flooding of summer marshes, which maximize production of freshwater fishes, followed by steady drying that concentrate fish during the season when storks nest (Kahl 1964). Successful nesting colonies are those that have a large number of foraging sites. To maintain a wide range of foraging sites, a variety of wetland types should be present, with both short and long hydroperiods. The Service (1999) describes a short hydroperiod as a 1 to 5-month wet/dry cycle, and a long hydroperiod as greater than 5 months. During the wet season, wood storks generally feed in the shallow water of the short-hydroperiod wetlands and in coastal habitats during low tide. During the dry season, foraging shifts to longer hydroperiod interior wetlands as they progressively dry-down (though usually retaining some surface water throughout the dry season).

Wood storks occur in a wide variety of wetland habitats. Typical foraging sites for the wood stork include freshwater marshes and stock ponds, shallow, seasonally flooded roadside and agricultural ditches, narrow tidal creeks and shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs. Because of their specialized feeding behavior, wood storks forage most effectively in shallow-water areas with highly concentrated prey. Through tactolocation, or grope feeding, wood storks in south Florida feed almost exclusively on fish between 2 and 25 centimeters [cm] (1 and 10 inches) in length (Ogden et al. 1976). Good foraging conditions are characterized by water that is relatively calm, uncluttered by dense thickets of aquatic vegetation, and having a water depth between 5 and 38 cm (5 and 15 inches) deep, although wood storks may forage in other wetlands. Ideally, preferred foraging wetlands would include a mosaic of emergent and shallow open-water areas. The emergent component provides nursery habitat for small fish, frogs, and other aquatic prey and the shallow, open-water areas provide sites for concentration of the prey during seasonal dry-down of the wetland.

Conservation Measures

The Service routinely concurs with the Corps' "may affect, not likely to adversely affect" determination for individual project effects to the wood stork when project effects are insignificant due to scope or location, or if assurances are given that wetland impacts have been avoided, minimized, and adequately compensated such that there is no net loss in foraging potential. We utilize our *Habitat Management Guidelines for the Wood Stork in the Southeast Region* (Service 1990) (Enclosure 1) (HMG) in project evaluation. The HMG is currently under review and once final will replace the enclosed HMG. There is no designated critical habitat for the wood stork.

The SFESO recognizes a 29.9 kilometer [km] (18.6-mile) core foraging area (CFA) around all known wood stork colonies in south Florida. Enclosure 2 (to be updated as necessary) provides locations of colonies and their CFAs in south Florida that have been documented as active within the last 10 years. The Service believes loss of suitable wetlands within these CFAs may reduce foraging opportunities for the wood stork. To minimize adverse effects to the wood stork, we recommend compensation be provided for impacts to foraging habitat. The compensation should consider wetland type, location, function, and value (hydrology, vegetation, prey utilization) to ensure that wetland functions lost due to the project are adequately offset. Wetlands offered as compensation should be of the same hydroperiod and located within the CFAs of the affected wood stork colonies. The Service may accept, under special circumstances, wetland compensation located outside the CFAs of the affected wood stork nesting colonies. On occasion, wetland credits purchased from a "Service Approved" mitigation bank located outside the CFAs could be acceptable to the Service, depending on location of impacted wetlands relative to the permitted service area of the bank, and whether or not the bank has wetlands having the same hydroperiod as the impacted wetland.

In an effort to reduce correspondence in effect determinations and responses, the Service is providing the Wood Stork Effect Determination Key below. If the use of this key results in a Corps determination of "no effect" for a particular project, the Service supports this determination. If the use of this Key results in a determination of NLAA, the Service concurs with this determination[1]. This Key is subject to revisitation as the Corps and Service deem necessary.

The Key is as follows:

A. Project within 0.76 km (0.47 mile)[2] of an active colony site[3] ..... "*may affect*[4]"

Project impacts Suitable Foraging Habitat (SFH)[5] at a location greater than 0.76 km (0.47 mile) from a colony site..... "*go to* B"

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[1] With an outcome of "no effect" or "NLAA" as outlined in this key, and the project has less than 20.2 hectares (50 acres) of wetland impacts, the requirements of section 7 of the Act are fulfilled for the wood stork and no further action is required. For projects with greater than 20.2 hectares (50 acres) of wetland impacts, written concurrence of NLAA from the Service is necessary.

[2] Within the secondary zone (the average distance from the border of a colony to the limits of the secondary zone is 0.76 km (2,500 feet, or 0.47 mi).

[3] An active colony is defined as a colony that is currently being used for nesting by wood storks or has historically over the last 10 years been used for nesting by wood storks.

[4] Consultation may be concluded informally or formally depending on project impacts.

[5] Suitable foraging habitat (SFH) includes wetlands that typically have shallow-open water areas that are relatively calm and have a permanent or seasonal water depth between 5 to 38 cm (2 to 15 inches) deep. Other shallow non-wetland water bodies are also SFH. SFH supports and concentrates, or is capable of supporting and concentrating small fish, frogs, and other aquatic prey. Examples of SFH include, but are not limited to freshwater marshes, small ponds, shallow, seasonally flooded roadside or agricultural ditches, seasonally flooded pastures, narrow tidal creeks or shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs.

Project does not affect SFH……..…..*"no effect[1]".*

B. Project impact to SFH is less than 0.20 hectare (one-half acre)[6]……..……*NLAA[1]"*

Project impact to SFH is greater in scope than 0.20 hectare (one-half acre)....……*go to* C

C. Project impacts to SFH not within the CFA (29.9 km, 18.6 miles) of a colony site ……..…….…….……*go to* D

Project impacts to SFH within the CFA of a colony site ……..……...…….*go to* E

D. Project impacts to SFH have been avoided and minimized to the extent practicable; compensation (Service approved mitigation bank or as provided in accordance with Mitigation Rule 33 CFR Part 332) for unavoidable impacts is proposed in accordance with the CWA section 404(b)(1) guidelines; and habitat compensation replaces the foraging value matching the hydroperiod[7] of the wetlands affected and provides foraging value similar to, or higher than, that of impacted wetlands. See Enclosure 3 for a detailed discussion of the hydroperiod foraging values, an example, and further guidance[8]…….. *NLAA[1]"*

Project not as above.……... *"may affect[4]"*

E. Project provides SFH compensation in accordance with the CWA section 404(b)(1) guidelines and is not contrary to the HMG; habitat compensation is within the appropriate CFA or within the service area of a Service-approved mitigation bank; and habitat compensation replaces foraging value, consisting of wetland enhancement or restoration matching the hydroperiod[7] of the wetlands affected, and provides foraging value similar

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[6] On an individual basis, SFH impacts to wetlands less than 0.20 hectare (one-half acre) generally will not have a measurable effect on wood storks, although we request that the Corps require mitigation for these losses when appropriate. Wood storks are a wide ranging species, and individually, habitat change from impacts to SFH less than one-half acre are not likely to adversely affect wood storks. However, collectively they may have an effect and therefore regular monitoring and reporting of these effects are important.

[7] Several researchers (Flemming et al. 1994; Ceilley and Bortone 2000) believe that the short hydroperiod wetlands provide a more important pre-nesting foraging food source and a greater early nestling survivor value for wood storks than the foraging base (grams of fish per square meter) than long hydroperiod wetlands provide. Although the short hydroperiod wetlands may provide less fish, these prey bases historically were more extensive and met the foraging needs of the pre-nesting storks and the early-age nestlings. Nest productivity may suffer as a result of the loss of short hydroperiod wetlands. We believe that most wetland fill and excavation impacts permitted in south Florida are in short hydroperiod wetlands. Therefore, we believe that it is especially important that impacts to these short hydroperiod wetlands within CFAs are avoided, minimized, and compensated for by enhancement/restoration of short hydroperiod wetlands.

[8] For this Key, the Service requires an analysis of foraging prey base losses and enhancements from the proposed action as shown in the examples in Enclosure 3 for projects with greater than 2.02 hectares (5 acres) of wetland impacts. For projects with less than 2.02 hectares (5 acres) of wetland impacts, an individual foraging prey base analysis is not necessary although type for type wetland compensation is still a requirement of the Key.

to, or higher than, that of impacted wetlands. See Enclosure 3 for a detailed discussion of the hydroperiod foraging values, an example, and further guidance[8]……..*"NLAA[1]"*

Project does not satisfy these elements ……..……..……..*"may affect[4]"*

This Key does not apply to Comprehensive Everglades Restoration Plan projects, as they will require project-specific consultations with the Service.

Monitoring and Reporting Effects

For the Service to monitor cumulative effects, it is important for the Corps to monitor the number of permits and provide information to the Service regarding the number of permits issued where the effect determination was: "may affect, not likely to adversely affect." We request that the Corps send us an annual summary consisting of: project dates, Corps identification numbers, project acreages, project wetland acreages, and project locations in latitude and longitude in decimal degrees.

Thank you for your cooperation and effort in protecting federally listed species. If you have any questions, please contact Allen Webb at extension 246.

Sincerely yours,

Paul Souza
Field Supervisor
South Florida Ecological Services Office

Enclosures

cc: w/enclosures (electronic only)
Corps, Jacksonville, Florida (Stu Santos)
EPA, West Palm Beach, Florida (Richard Harvey)
FWC, Vero Beach, Florida (Joe Walsh)
Service, Jacksonville, Florida (Billy Brooks)

LITERATURE CITED

Ceilley, D.W. and S.A. Bortone. 2000. A survey of freshwater fishes in the hydric flatwoods of flint pen strand, Lee County, Florida. Proceedings of the 27th Annual Conference on Ecosystems Restoration and Creation, 70-91. Hillsborough Community College; Hillsborough County, Florida.

Flemming, D.M., W.F. Wolff, and D.L. DeAngelis. 1994. Importance of landscape heterogeneity to wood storks. Florida Everglades Management 18: 743-757.

Kahl, M.P., Jr. 1964. Food ecology of the wood stork (*Mycteria americana*) in Florida. Ecological Monographs 34:97-117.

Ogden, J.C. 1991. Nesting by wood storks in natural, altered, and artificial wetlands in central and northern Florida. Colonial Waterbirds 14:39-45.

Ogden, J.C., J.A. Kushlan, and J.T. Tilmant. 1976. Prey selectivity by the wood stork. Condor 78(3):324-330.

Ogden, J.C. 1996. Wood Stork *in* J.A. Rodgers, H. Kale II, and H.T. Smith, eds. Rare and endangered biota of Florida. University Press of Florida; Gainesville, Florida.

Rodgers, J.A. Jr., A.S. Wenner, and S.T. Schwikert. 1987. Population dynamics of wood storks in northern and central Florida, USA. Colonial Waterbirds 10:151-156.

Rodgers, J.A., Jr., S.T. Schwikert, and A. Shapiro-Wenner. 1996. Nesting habitat of wood storks in north and central Florida, USA. Colonial Waterbirds 19:1-21.

U.S. Fish and Wildlife Service. 1990. Habitat management guidelines for the wood stork in the southeast region. Prepared by John C. Ogden for the Southeast Region U.S. Fish and Wildlife Service; Atlanta, Georgia.

U.S. Fish and Wildlife Service. 1999. South Florida multi-species recovery plan. Fish and Wildlife Service; Atlanta, Georgia. Available from: http://verobeach.fws.gov/Programs/Recovery/vbms5.html.

APPENDIX K

Grasshopper Sparrow Specific Species Survey

Memorandum

Subject: **SR 70 from West of SR 31 to SE Highlands County Line Road**
USFWS Florida Grasshopper Sparrow Technical Results Memorandum
FPID 451942-1-22-01
Desoto County, FL

Introduction

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) study to evaluate options for widening State Road 70 (SR 70) in DeSoto County. The study covers 16.79 miles of SR 70 beginning west of SR 31 (Mile Post [MP] 14.973) and ending at SE Highlands County Line Road (MP 31.763). See **Appendix A** Project Location and Station Location Maps for project location. The objective of the PD&E study is to evaluate widening the existing two-lane undivided roadway to a four-lane divided roadway. The purpose of this project is to address traffic safety conditions on SR 70 in unincorporated DeSoto County. Other goals of this project are to maintain important east-west connectivity within the regional transportation network and to accommodate freight activity within the area.

This project is within the U.S. Fish and Wildlife Service's (USFWS) consultation area for the federally endangered Florida grasshopper sparrow (*Ammodramus savannarum floridanus*). Florida grasshopper sparrows were listed as a federally threatened species by the USFWS in 1986 and receive protection under the Endangered Species Act 16 U.S.C. §1531-1544, Florida's Endangered and Threatened Species Rule 68A-27 F.A.C., and the Migratory Bird Treaty Act 16 U.S.C. §§ 703–712.

Methodology

A desktop review was conducted for the project area to assess the suitable Florida grasshopper sparrow habitat in the project area. Suitable habitat is defined by the U.S. Fish and Wildlife Service as prairie-like (i.e., unforested areas with some grass cover). Florida grasshopper sparrows prefer areas within that habitat that are greater than 100 meters from the forest edge (Delany and Linda 1994, Delany et al. 1995). Habitat information was derived from the Florida Department of Transportation's Florida Land Use Cover, Forms, and Classification System (FLUCCS). Within the project limits there are approximately 826.5 acres of suitable habitat, consisting of cropland and pastureland (FLUCCS 210), other open lands (FLUCCS 260), herbaceous (FLUCCS 310), and shrub and brushland (FLUCCS 320). Based on the proposed project activities and the desktop review, it was determined that a formal Florida grasshopper sparrow was required, to be conducted between April 1, 2025, to June 15, 2025, per the USFWS' Florida grasshopper sparrow Draft Survey Protocol (USFWS 2004). This period encompasses peak nesting season.

Various field surveys were conducted by qualified biologists in March and April 2025, to confirm suitable habitat and the locations of survey stations. Based on the desktop and field assessments, 102 survey stations were strategically placed at 200-meter (656 foot) intervals along the project corridor where suitable habitat is present. The survey stations were located to document any Florida grasshopper sparrow observations within the project limits and a 100-meter (328 feet) buffer to account for off-site territories that might overlap onto the project area. See **Appendix A** Project Location and Station Map. Coordinates of each sampling station and its habitat type are provided in **Table 1.**

Table 1. Coordinates of each sampling station and its habitat type.

Survey Station	Latitude	Longitude	Habitat Type
1	27.21018	-81.827372	Cropland and Pastureland
2	27.209302	-81.825404	Cropland and Pastureland
3	27.208681	-81.821713	Other Open Lands
4	27.208343	-81.819749	Cropland and Pastureland
5	27.209219	-81.819249	Cropland and Pastureland
6	27.208333	-81.817426	Cropland and Pastureland
7	27.209208	-81.817196	Cropland and Pastureland
8	27.208317	-81.813362	Cropland and Pastureland
9	27.208257	-81.791029	Cropland and Pastureland
10	27.208251	-81.789019	Cropland and Pastureland
11	27.208243	-81.785632	Other Open Lands
12	27.20824	-81.77813	Cropland and Pastureland
13	27.209344	-81.750208	Cropland and Pastureland
14	27.209246	-81.74592	Cropland and Pastureland
15	27.209395	-81.748192	Cropland and Pastureland
16	27.208851	-81.740374	Cropland and Pastureland
17	27.209139	-81.6981	Cropland and Pastureland
18	27.209194	-81.690205	Cropland and Pastureland
19	27.209245	-81.688204	Cropland and Pastureland
20	27.20924	-81.686185	Cropland and Pastureland
21	27.208947	-81.616168	Cropland and Pastureland
22	27.209418	-81.610414	Cropland and Pastureland
23	27.209297	-81.608395	Cropland and Pastureland
24	27.209294	-81.606377	Cropland and Pastureland
25	27.209296	-81.604358	Cropland and Pastureland
26	27.209293	-81.602353	Cropland and Pastureland
27	27.209266	-81.60032	Cropland and Pastureland
28	27.209288	-81.598301	Cropland and Pastureland
29	27.209348	-81.592374	Cropland and Pastureland
30	27.209221	-81.586123	Cropland and Pastureland
31	27.209204	-81.584104	Cropland and Pastureland
32	27.209529	-81.576162	Cropland and Pastureland
33	27.209354	-81.573416	Cropland and Pastureland
34	27.209348	-81.571397	Cropland and Pastureland
35	27.209342	-81.569378	Cropland and Pastureland
36	27.209114	-81.5954	Cropland and Pastureland
37	27.209725	-81.822045	Cropland and Pastureland
38	27.20809	-81.780324	Cropland and Pastureland
39	27.210586	-81.745513	Cropland and Pastureland
40	27.207871	-81.744172	Cropland and Pastureland
41	27.210006	-81.743927	Cropland and Pastureland
42	27.207929	-81.742439	Cropland and Pastureland
43	27.207622	-81.721062	Cropland and Pastureland
44	27.207672	-81.717813	Cropland and Pastureland
45	27.208319	-81.651332	Cropland and Pastureland
46	27.208314	-81.649313	Cropland and Pastureland

Survey Station	Latitude	Longitude	Habitat Type
47	27.208309	-81.647294	Cropland and Pastureland
48	27.20807	-81.645276	Cropland and Pastureland
49	27.208024	-81.643129	Cropland and Pastureland
50	27.208	-81.641089	Cropland and Pastureland
51	27.20823	-81.63907	Cropland and Pastureland
52	27.208008	-81.632691	Cropland and Pastureland
53	27.207998	-81.629756	Cropland and Pastureland
54	27.208716	-81.626217	Cropland and Pastureland
55	27.208494	-81.614771	Cropland and Pastureland
56	27.208529	-81.588138	Cropland and Pastureland
57	27.211003	-81.823874	Cropland and Pastureland
58	27.21095	-81.821909	Cropland and Pastureland
59	27.211988	-81.744924	Cropland and Pastureland
60	27.210533	-81.7299	Cropland and Pastureland
61	27.210534	-81.727911	Cropland and Pastureland
62	27.207724	-81.727471	Herbaceous
63	27.211155	-81.717007	Cropland and Pastureland
64	27.210602	-81.711585	Cropland and Pastureland
65	27.208727	-81.712108	Cropland and Pastureland
66	27.210725	-81.7007	Cropland and Pastureland
67	27.20815	-81.70055	Cropland and Pastureland
68	27.208095	-81.688167	Cropland and Pastureland
69	27.207638	-81.686839	Cropland and Pastureland
70	27.206532	-81.684409	Cropland and Pastureland
71	27.208057	-81.684138	Cropland and Pastureland
72	27.205852	-81.68221	Cropland and Pastureland
73	27.20764	-81.682134	Cropland and Pastureland
74	27.205848	-81.680192	Cropland and Pastureland
75	27.207635	-81.680115	Cropland and Pastureland
76	27.206261	-81.652618	Cropland and Pastureland
77	27.204704	-81.652597	Cropland and Pastureland
78	27.206256	-81.650599	Cropland and Pastureland
79	27.204699	-81.650578	Cropland and Pastureland
80	27.206251	-81.64858	Cropland and Pastureland
81	27.20459	-81.648411	Cropland and Pastureland
82	27.206304	-81.646277	Cropland and Pastureland
83	27.204643	-81.646108	Cropland and Pastureland
84	27.204806	-81.640517	Cropland and Pastureland
85	27.206448	-81.640504	Cropland and Pastureland
86	27.2049	-81.638718	Cropland and Pastureland
87	27.207066	-81.631571	Cropland and Pastureland
88	27.206646	-81.629634	Cropland and Pastureland
89	27.20807	-81.624728	Cropland and Pastureland
90	27.208606	-81.622795	Cropland and Pastureland
91	27.208454	-81.61277	Cropland and Pastureland
92	27.207885	-81.595762	Cropland and Pastureland
93	27.208041	-81.593924	Cropland and Pastureland

Survey Station	Latitude	Longitude	Habitat Type
94	27.208247	-81.58164	Cropland and Pastureland
95	27.206638	-81.581614	Cropland and Pastureland
96	27.207578	-81.579952	Cropland and Pastureland
97	27.206008	-81.579925	Cropland and Pastureland
98	27.208216	-81.577952	Cropland and Pastureland
99	27.206393	-81.577905	Cropland and Pastureland
100	27.208708	-81.574752	Cropland and Pastureland
101	27.207197	-81.567407	Cropland and Pastureland
102	27.208592	-81.567336	Cropland and Pastureland

Biologists experienced in avian surveys conducted the surveys, beginning no earlier than 30 minutes prior to sunrise, and ending no later than three hours after sunrise. The surveys were conducted one morning every two weeks for duration of the survey period (3 survey days total for each station). The Florida grasshopper sparrow survey for the 2025 nesting season began on May 5, and lasted until June 4, 2025. Surveys were performed only on calm days, with wind speeds less than 15 miles per hour. Each station survey first consisted of one minute of passive watching and listening. This was followed by a thirty-second Florida grasshopper sparrow vocalization playback in each of the four cardinal directions, separated by one minute of listening and watching. The volume of the audio player was sufficient to hear the call from a distance of 100 meters. Results of each survey were documented on field data sheets and summarized in **Table 3**.

Results

Table 2 summarizes the survey dates, sunrise times, and weather conditions (start and end temperature, wind speed, visibility, and precipitation) for the 2025 season.

Table 2. Survey dates and weather conditions.

Survey Date	Sunrise[1]	**Start Weather** Temperature/Wind/Visibility/Precipitation	**End Weather** Temperature/Wind/Visibility/Precipitation
5/5/25	0644	67°F/2mph/5 miles/0”	71°F/3mph/8 miles/0”
5/6/25	0643	67°F/2mph/6 miles/0”	75°F/4mph/10 miles/0”
5/7/25	0643	70°F/4mph/7 miles/0”	74°F/5mph/10 miles/0”
5/19/25	0636	72°F/2mph/8 miles/0”	82°F/5mph/10 miles/0”
5/20/25	0636	74°F/3mph/8 miles/0”	78°F/5mph/10 miles/0”
5/21/25	0635	73°F/1mph/7 miles/0”	74°F/2mph/10 miles/0”
6/2/25	0632	70°F/5mph/10 miles/0”	74°F/6mph/11 miles/0”
6/3/25	0632	72°F/5mph/9 miles/0”	74°F/6mph/10 miles/0”
6/4/25	0632	72°F/6mph/8 miles/0”	74°F/6mph/9 miles/0”

[1] Sunrise time for Arcadia, FL. Rounded to nearest minute.

During the 2025 nest season, no Florida grasshopper sparrows were observed or heard, and no nests were discovered. Suitable habitat within and adjacent to the project limits has largely been converted into active cattle pastures or other cropland, which are generally incompatible with grasshopper sparrows (Delaney and Linda, 1994; Pranty and Tucker, Jr., 2006). See **Table 3** for Field Data Summary. See **Appendix B** for Photo Documentation.

Table 3 summarizes the survey dates, surveyors, and observations for the 2025 season.

Table 3. Field data summary of the Spring 2025 Florida grasshopper sparrow surveys.

Survey Event	Survey Point	Date	Primary Surveyor	Present/ Absent	Number Observed/Heard
Event 1	1	5/5/2025	Tristan Sommers	Absent	0
Event 1	2	5/5/2025	Tristan Sommers	Absent	0
Event 1	3	5/5/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	4	5/5/2025	Tristan Sommers	Absent	0
Event 1	5	5/5/2025	Tristan Sommers	Absent	0
Event 1	6	5/5/2025	Tristan Sommers	Absent	0
Event 1	7	5/5/2025	Tristan Sommers	Absent	0
Event 1	8	5/5/2025	Tristan Sommers	Absent	0
Event 1	9	5/5/2025	Max Carfagno	Absent	0
Event 1	10	5/5/2025	Max Carfagno	Absent	0
Event 1	11	5/5/2025	Max Carfagno	Absent	0
Event 1	12	5/5/2025	Max Carfagno	Absent	0
Event 1	13	5/5/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	14	5/5/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	15	5/5/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	16	5/5/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	17	5/7/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	18	5/7/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	19	5/7/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	20	5/7/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	21	5/7/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	22	5/7/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	23	5/7/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	24	5/7/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	25	5/7/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	26	5/7/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	27	5/7/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	28	5/7/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	29	5/7/2025	Gene Massarella, Michaela Sweeney	Absent	0

Survey Event	Survey Point	Date	Primary Surveyor	Present/ Absent	Number Observed/Heard
Event 1	30	5/6/2025	Tristan Sommers	Absent	0
Event 1	31	5/6/2025	Tristan Sommers	Absent	0
Event 1	32	5/6/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	33	5/6/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	34	5/6/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	35	5/6/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	36	5/7/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	37	5/5/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	38	5/5/2025	Max Carfagno	Absent	0
Event 1	39	5/5/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	40	5/5/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	41	5/5/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	42	5/5/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	43	5/5/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	44	5/5/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	45	5/6/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	46	5/6/2025	Max Carfagno	Absent	0
Event 1	47	5/6/2025	Max Carfagno	Absent	0
Event 1	48	5/6/2025	Lee Walton, Joellen Callahan	Absent	0
Event 1	49	5/6/2025	Lee Walton, Joellen Callahan	Absent	0
Event 1	50	5/6/2025	Lee Walton, Joellen Callahan	Absent	0
Event 1	51	5/6/2025	Lee Walton, Joellen Callahan	Absent	0
Event 1	52	5/6/2025	Elijah Blue	Absent	0
Event 1	53	5/6/2025	Elijah Blue	Absent	0
Event 1	54	5/6/2025	Elijah Blue	Absent	0
Event 1	55	5/7/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	56	5/7/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	57	5/5/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	58	5/5/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	59	5/5/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	60	5/5/2025	Elijah Blue	Absent	0
Event 1	61	5/5/2025	Elijah Blue	Absent	0
Event 1	62	5/5/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	63	5/5/2025	Elijah Blue	Absent	0
Event 1	64	5/5/2025	Elijah Blue	Absent	0
Event 1	65	5/5/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	66	5/5/2025	Elijah Blue	Absent	0

Survey Event	Survey Point	Date	Primary Surveyor	Present/ Absent	Number Observed/Heard
Event 1	67	5/7/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	68	5/7/2025	Tristan Sommers	Absent	0
Event 1	69	5/7/2025	Tristan Sommers	Absent	0
Event 1	70	5/7/2025	Tristan Sommers	Absent	0
Event 1	71	5/7/2025	Tristan Sommers	Absent	0
Event 1	72	5/7/2025	Tristan Sommers	Absent	0
Event 1	73	5/7/2025	Tristan Sommers	Absent	0
Event 1	74	5/7/2025	Tristan Sommers	Absent	0
Event 1	75	5/7/2025	Tristan Sommers	Absent	0
Event 1	76	5/6/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	77	5/6/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	78	5/6/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	79	5/6/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	80	5/6/2025	Max Carfagno	Absent	0
Event 1	81	5/6/2025	Max Carfagno	Absent	0
Event 1	82	5/6/2025	Max Carfagno	Absent	0
Event 1	83	5/6/2025	Max Carfagno	Absent	0
Event 1	84	5/6/2025	Lee Walton, Joellen Callahan	Absent	0
Event 1	85	5/6/2025	Lee Walton, Joellen Callahan	Absent	0
Event 1	86	5/6/2025	Lee Walton, Joellen Callahan	Absent	0
Event 1	87	5/6/2025	Elijah Blue	Absent	0
Event 1	88	5/6/2025	Elijah Blue	Absent	0
Event 1	89	5/6/2025	Elijah Blue	Absent	0
Event 1	90	5/6/2025	Elijah Blue	Absent	0
Event 1	91	5/7/2025	Shannon Gonzalez, Joellen Callahan	Absent	0
Event 1	92	5/7/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	93	5/7/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 1	94	5/6/2025	Tristan Sommers	Absent	0
Event 1	95	5/6/2025	Tristan Sommers	Absent	0
Event 1	96	5/6/2025	Tristan Sommers	Absent	0
Event 1	97	5/6/2025	Tristan Sommers	Absent	0
Event 1	98	5/6/2025	Tristan Sommers	Absent	0
Event 1	99	5/6/2025	Tristan Sommers	Absent	0
Event 1	100	5/6/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	101	5/6/2025	Bill Hentges, Emma Robbins	Absent	0
Event 1	102	5/6/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	1	5/19/2025	Gene Massarella, Whitney Kinnison	Absent	0

Survey Event	Survey Point	Date	Primary Surveyor	Present/ Absent	Number Observed/Heard
Event 2	2	5/19/2025	Gene Massarella, Whitney Kinnison	Absent	0
Event 2	3	5/19/2025	Gene Massarella, Whitney Kinnison	Absent	0
Event 2	4	5/19/2025	Gene Massarella, Whitney Kinnison	Absent	0
Event 2	5	5/19/2025	Gene Massarella, Whitney Kinnison	Absent	0
Event 2	6	5/19/2025	Gene Massarella, Whitney Kinnison	Absent	0
Event 2	7	5/19/2025	Gene Massarella, Whitney Kinnison	Absent	0
Event 2	8	5/19/2025	Gene Massarella, Whitney Kinnison	Absent	0
Event 2	9	5/19/2025	Elijah Blue	Absent	0
Event 2	10	5/19/2025	Elijah Blue	Absent	0
Event 2	11	5/19/2025	Elijah Blue	Absent	0
Event 2	12	5/19/2025	Elijah Blue	Absent	0
Event 2	13	5/19/2025	Max Carfagno	Absent	0
Event 2	14	5/19/2025	Max Carfagno	Absent	0
Event 2	15	5/19/2025	Max Carfagno	Absent	0
Event 2	16	5/19/2025	Max Carfagno	Absent	0
Event 2	17	5/21/2025	Nate Goddard, Joellen Callahan	Absent	0
Event 2	18	5/21/2025	Nate Goddard, Joellen Callahan	Absent	0
Event 2	19	5/21/2025	Nate Goddard, Joellen Callahan	Absent	0
Event 2	20	5/21/2025	Nate Goddard, Joellen Callahan	Absent	0
Event 2	21	5/21/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	22	5/21/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	23	5/21/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	24	5/21/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	25	5/21/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	26	5/21/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	27	5/21/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	28	5/21/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	29	5/21/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	30	5/20/2025	Tristan Sommers	Absent	0
Event 2	31	5/20/2025	Tristan Sommers	Absent	0
Event 2	32	5/20/2025	Nate Goddard, Joellen Callahan	Absent	0
Event 2	33	5/20/2025	Nate Goddard, Joellen Callahan	Absent	0
Event 2	34	5/20/2025	Nate Goddard, Joellen Callahan	Absent	0
Event 2	35	5/20/2025	Nate Goddard, Joellen Callahan	Absent	0
Event 2	36	5/21/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	37	5/19/2025	Tristan Sommers	Absent	0
Event 2	38	5/19/2025	Elijah Blue	Absent	0

Survey Event	Survey Point	Date	Primary Surveyor	Present/ Absent	Number Observed/Heard
Event 2	39	5/19/2025	Max Carfagno	Absent	0
Event 2	40	5/19/2025	Lee Walton, Joellen Callahan	Absent	0
Event 2	41	5/19/2025	Max Carfagno	Absent	0
Event 2	42	5/19/2025	Lee Walton, Joellen Callahan	Absent	0
Event 2	43	5/19/2025	Lee Walton, Joellen Callahan	Absent	0
Event 2	44	5/19/2025	Lee Walton, Joellen Callahan	Absent	0
Event 2	45	5/20/2025	Shannon Gonzalez, Whitney Kinnison	Absent	0
Event 2	46	5/20/2025	Max Carfagno	Absent	0
Event 2	47	5/20/2025	Max Carfagno	Absent	0
Event 2	48	5/20/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	49	5/20/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	50	5/20/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	51	5/20/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	52	5/20/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	53	5/20/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	54	5/20/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	55	5/21/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	56	5/21/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	57	5/19/2025	Tristan Sommers	Absent	0
Event 2	58	5/19/2025	Tristan Sommers	Absent	0
Event 2	59	5/19/2025	Max Carfagno	Absent	0
Event 2	60	5/19/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	61	5/19/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	62	5/19/2025	Lee Walton, Joellen Callahan	Absent	0
Event 2	63	5/19/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	64	5/19/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	65	5/19/2025	Lee Walton, Joellen Callahan	Absent	0
Event 2	66	5/19/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	67	5/21/2025	Nate Goddard, Joellen Callahan	Absent	0
Event 2	68	5/21/2025	Tristan Sommers	Absent	0
Event 2	69	5/21/2025	Tristan Sommers	Absent	0
Event 2	70	5/21/2025	Tristan Sommers	Absent	0
Event 2	71	5/21/2025	Tristan Sommers	Absent	0
Event 2	72	5/21/2025	Tristan Sommers	Absent	0
Event 2	73	5/21/2025	Tristan Sommers	Absent	0
Event 2	74	5/21/2025	Tristan Sommers	Absent	0
Event 2	75	5/21/2025	Tristan Sommers	Absent	0

Survey Event	Survey Point	Date	Primary Surveyor	Present/ Absent	Number Observed/Heard
Event 2	76	5/20/2025	Shannon Gonzalez, Whitney Kinnison	Absent	0
Event 2	77	5/20/2025	Shannon Gonzalez, Whitney Kinnison	Absent	0
Event 2	78	5/20/2025	Shannon Gonzalez, Whitney Kinnison	Absent	0
Event 2	79	5/20/2025	Shannon Gonzalez, Whitney Kinnison	Absent	0
Event 2	80	5/20/2025	Max Carfagno	Absent	0
Event 2	81	5/20/2025	Max Carfagno	Absent	0
Event 2	82	5/20/2025	Max Carfagno	Absent	0
Event 2	83	5/20/2025	Max Carfagno	Absent	0
Event 2	84	5/20/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	85	5/20/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	86	5/20/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	87	5/20/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	88	5/20/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	89	5/20/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	90	5/20/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	91	5/21/2025	Bill Hentges, Emma Robbins	Absent	0
Event 2	92	5/21/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	93	5/21/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 2	94	5/20/2025	Tristan Sommers	Absent	0
Event 2	95	5/20/2025	Tristan Sommers	Absent	0
Event 2	96	5/20/2025	Tristan Sommers	Absent	0
Event 2	97	5/20/2025	Tristan Sommers	Absent	0
Event 2	98	5/20/2025	Tristan Sommers	Absent	0
Event 2	99	5/20/2025	Tristan Sommers	Absent	0
Event 2	100	5/20/2025	Lee Walton, Joellen Callahan	Absent	0
Event 2	101	5/20/2025	Lee Walton, Joellen Callahan	Absent	0
Event 2	102	5/20/2025	Lee Walton, Joellen Callahan	Absent	0
Event 3	1	6/2/2025	Tristan Sommers	Absent	0
Event 3	2	6/2/2025	Tristan Sommers	Absent	0
Event 3	3	6/2/2025	Tristan Sommers	Absent	0
Event 3	4	6/2/2025	Tristan Sommers	Absent	0
Event 3	5	6/2/2025	Tristan Sommers	Absent	0
Event 3	6	6/2/2025	Tristan Sommers	Absent	0
Event 3	7	6/2/2025	Tristan Sommers	Absent	0
Event 3	8	6/2/2025	Tristan Sommers	Absent	0
Event 3	9	6/2/2025	Max Carfagno	Absent	0
Event 3	10	6/2/2025	Max Carfagno	Absent	0

Survey Event	Survey Point	Date	Primary Surveyor	Present/ Absent	Number Observed/Heard
Event 3	11	6/2/2025	Max Carfagno	Absent	0
Event 3	12	6/2/2025	Max Carfagno	Absent	0
Event 3	13	6/2/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	14	6/2/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	15	6/2/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	16	6/2/2025	Lee Walton, Joellen Callahan	Absent	0
Event 3	17	6/4/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	18	6/4/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	19	6/4/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	20	6/4/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	21	6/4/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	22	6/4/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	23	6/4/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	24	6/4/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	25	6/4/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	26	6/4/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	27	6/4/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	28	6/4/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	29	6/4/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	30	6/3/2025	Tristan Sommers	Absent	0
Event 3	31	6/3/2025	Tristan Sommers	Absent	0
Event 3	32	6/3/2025	Tristan Sommers	Absent	0
Event 3	33	6/3/2025	Elijah Blue	Absent	0
Event 3	34	6/3/2025	Elijah Blue	Absent	0
Event 3	35	6/3/2025	Elijah Blue	Absent	0
Event 3	36	6/4/2025	Elijah Blue	Absent	0
Event 3	37	6/2/2025	Elijah Blue	Absent	0
Event 3	38	6/2/2025	Max Carfagno	Absent	0
Event 3	39	6/2/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	40	6/2/2025	Lee Walton, Joellen Callahan	Absent	0
Event 3	41	6/2/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	42	6/2/2025	Lee Walton, Joellen Callahan	Absent	0
Event 3	43	6/2/2025	Lee Walton, Joellen Callahan	Absent	0
Event 3	44	6/2/2025	Lee Walton, Joellen Callahan	Absent	0
Event 3	45	6/3/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	46	6/3/2025	Max Carfagno	Absent	0
Event 3	47	6/3/2025	Max Carfagno	Absent	0

Survey Event	Survey Point	Date	Primary Surveyor	Present/ Absent	Number Observed/Heard
Event 3	48	6/3/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	49	6/3/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	50	6/3/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	51	6/3/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	52	6/3/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	53	6/3/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	54	6/3/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	55	6/4/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	56	6/4/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	57	6/2/2025	Elijah Blue	Absent	0
Event 3	58	6/2/2025	Elijah Blue	Absent	0
Event 3	59	6/2/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	60	6/2/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	61	6/2/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	62	6/2/2025	Lee Walton, Joellen Callahan	Absent	0
Event 3	63	6/2/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	64	6/2/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	65	6/2/2025	Lee Walton, Joellen Callahan	Absent	0
Event 3	66	6/2/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	67	6/4/2025	Lee Walton, Joellen Callahan	Absent	0
Event 3	68	6/4/2025	Tristan Sommers	Absent	0
Event 3	69	6/4/2025	Tristan Sommers	Absent	0
Event 3	70	6/4/2025	Tristan Sommers	Absent	0
Event 3	71	6/4/2025	Tristan Sommers	Absent	0
Event 3	72	6/4/2025	Tristan Sommers	Absent	0
Event 3	73	6/4/2025	Tristan Sommers	Absent	0
Event 3	74	6/4/2025	Tristan Sommers	Absent	0
Event 3	75	6/4/2025	Tristan Sommers	Absent	0
Event 3	76	6/3/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	77	6/3/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	78	6/3/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	79	6/3/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	80	6/3/2025	Max Carfagno	Absent	0
Event 3	81	6/3/2025	Max Carfagno	Absent	0
Event 3	82	6/3/2025	Max Carfagno	Absent	0
Event 3	83	6/3/2025	Max Carfagno	Absent	0
Event 3	84	6/3/2025	Jeff Rupe, Joellen Callahan	Absent	0

Survey Event	Survey Point	Date	Primary Surveyor	Present/ Absent	Number Observed/Heard
Event 3	85	6/3/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	86	6/3/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	87	6/3/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	88	6/3/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	89	6/3/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	90	6/3/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	91	6/4/2025	Bill Hentges, Emma Robbins	Absent	0
Event 3	92	6/4/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	93	6/4/2025	Gene Massarella, Michaela Sweeney	Absent	0
Event 3	94	6/3/2025	Tristan Sommers	Absent	0
Event 3	95	6/3/2025	Tristan Sommers	Absent	0
Event 3	96	6/3/2025	Tristan Sommers	Absent	0
Event 3	97	6/3/2025	Tristan Sommers	Absent	0
Event 3	98	6/3/2025	Tristan Sommers	Absent	0
Event 3	99	6/3/2025	Tristan Sommers	Absent	0
Event 3	100	6/3/2025	Elijah Blue	Absent	0
Event 3	101	6/3/2025	Jeff Rupe, Joellen Callahan	Absent	0
Event 3	102	6/3/2025	Jeff Rupe, Joellen Callahan	Absent	0

Conclusion

Results of the Spring 2025 Florida grasshopper sparrow survey indicate that active nests or foraging territory do not occur within the project footprint or the 100-meter buffer zone around the perimeter of the project area. Therefore, it has been determined that the proposed construction ***may affect, not likely to adversely affect*** the Florida grasshopper sparrow. This survey is valid for one year. If construction does not begin within that year, coordination with USFWS should be re-initiated to determine if additional surveys are required.

SP0070104-2:

LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC - LAWS TO BE OBSERVED - COMPLIANCE WITH FEDERAL ENDANGERED SPECIES ACT AND OTHER WILDLIFE REGULATIONS. (REV 6-16-17) (FA 6-28-17) (1-20)

Additionally, Section 7-1.4: Compliance with Federal Endangered Species Act and other Wildlife Regulations of the Standard Specifications for Road and Bridge Construction should be adhered to for wildlife involvement during construction. If you have any questions, or if you would like any additional information, please contact James Fine at (813) 310-3217 or via e-mail at jfine@hntb.com.

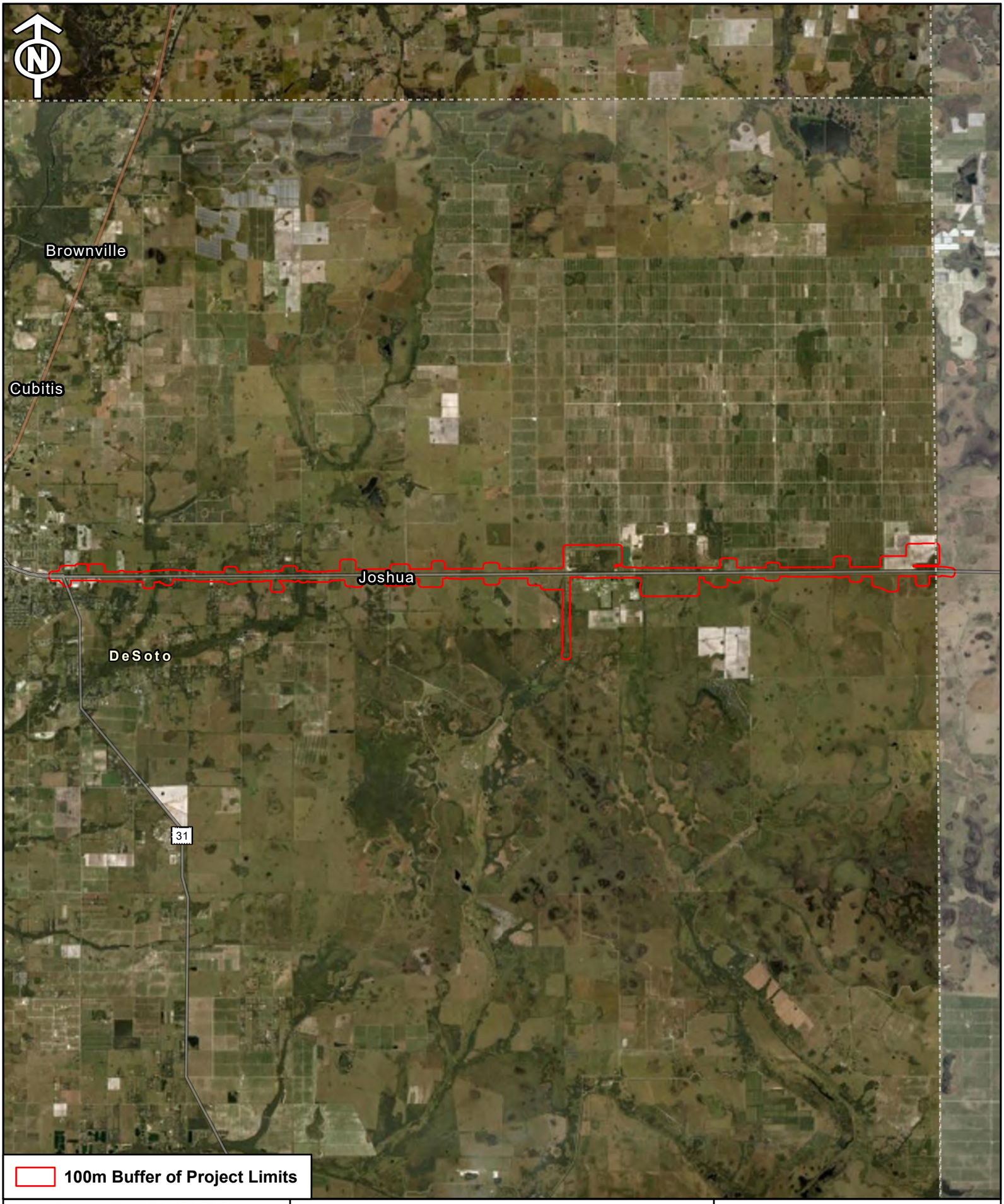
References

Delaney, M.F. and S.B. Linda. 1994. Characteristics of occupied and abandoned Florida Grasshopper Sparrow territories. Florida Field Naturalist 22:106-109.

Delany, M.F., C.T. Moore, and D.R. Progulske, Jr. 1995. Territory size and movements of Florida grasshopper sparrows. Journal of Field Ornithology, 66(2):305-309.

Pranty, B., and J.W. Tucker, Jr. 2006. Ecology and Management of the Florida Grasshopper Sparrow. Land of Fire and Water: The Florida Dry Prairie Ecosystem. Reed F. Noss, ed.

U.S Fish and Wildlife Service (USFWS). 2004. Draft Species Conservation Guidelines, South Florida, Florida Grasshopper Sparrow. South Florida Ecological Services Office, Vero Beach, Florida.

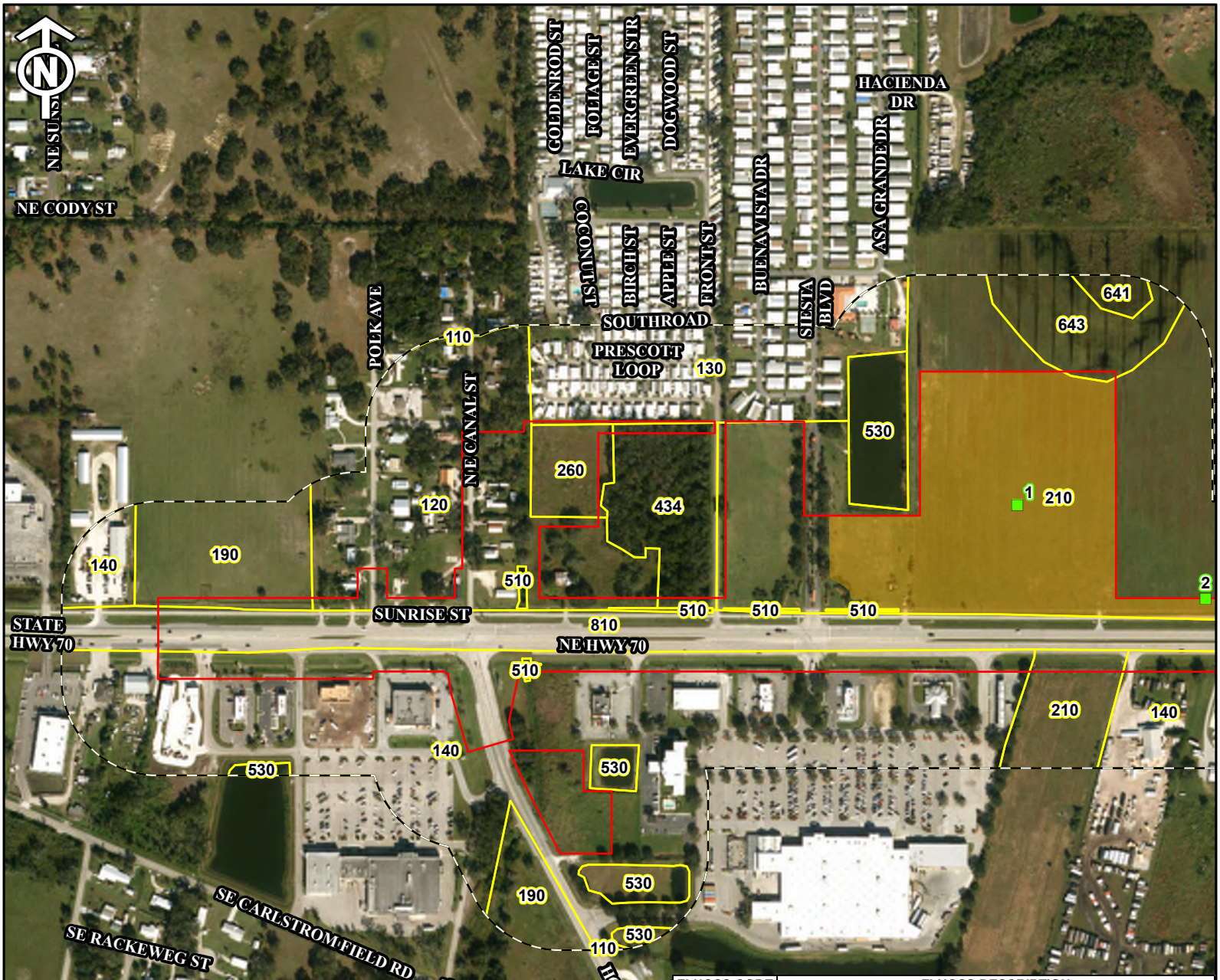


FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
LOCATION MAP

0 20,000 Feet

0 3,000 6,000Meters



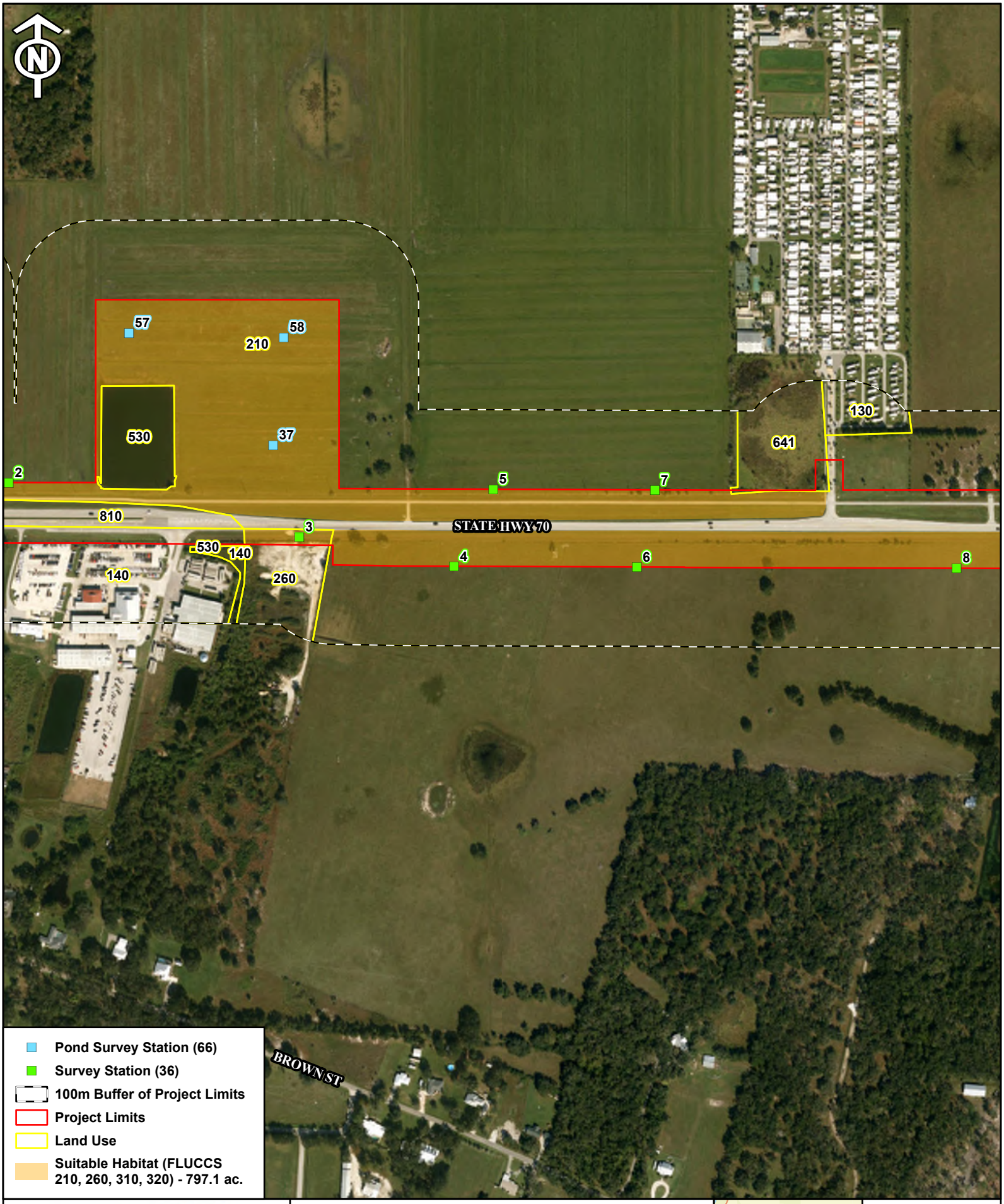
- Pond Survey Station (66)
- Survey Station (36)
- 100m Buffer of Project Limits
- Project Limits
- Land Use
- Suitable Habitat (FLUCCS 210, 260, 310, 320) - 797.1 ac.

FLUCCS CODE	FLUCCS DESCRIPTION
110	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS PER ACRE
120	RESIDENTIAL MED DENSITY 2 TO 5 DWELLING UNITS PER ACRE
130	RESIDENTIAL HIGH DENSITY
140	COMMERCIAL AND SERVICES
150	INDUSTRIAL
170	INSTITUTIONAL
190	OPEN LAND
210	CROPLAND AND PASTURELAND
220	TREE CROPS
240	NURSERIES AND VINEYARDS
260	OTHER OPEN LANDS
310	HERBACEOUS
320	SHRUB AND BRUSHLAND
330	MIXED RANGELAND
411	PINE FLATWOODS
434	UPLAND HARDWOOD - CONIFEROUS MIX
510	STREAMS AND WATERWAYS
530	RESERVOIRS
615	STREAM AND LAKE SWAMPS (BOTTOMLAND)
630	WETLAND FORESTED MIXED
640	VEGETATED NON-FORESTED WETLANDS
641	FRESHWATER MARSHES
643	WET PRAIRIES
644	EMERGENT AQUATIC VEGETATION
740	DISTURBED
810	TRANSPORTATION

FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 1 of 26

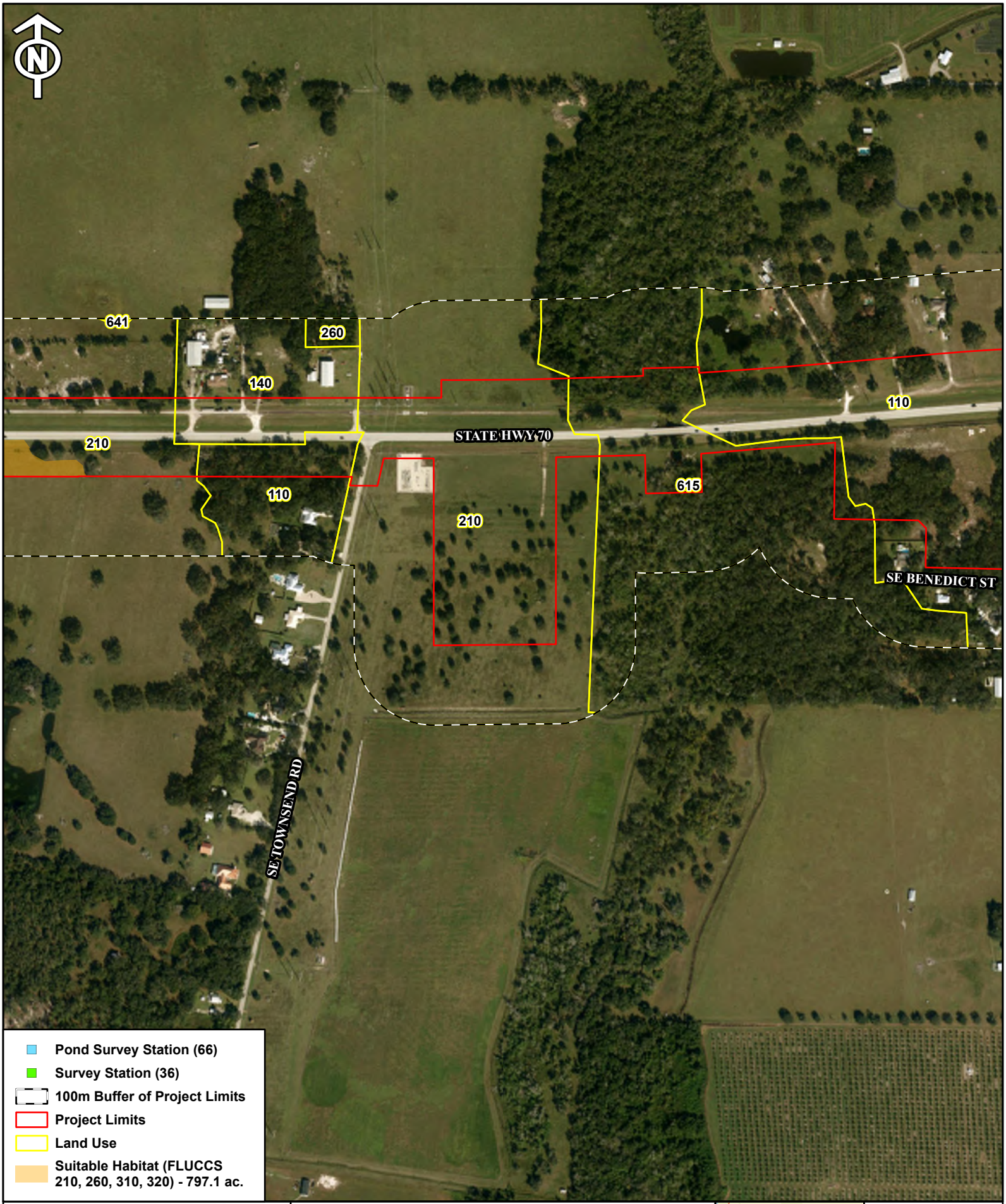
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 2 of 26

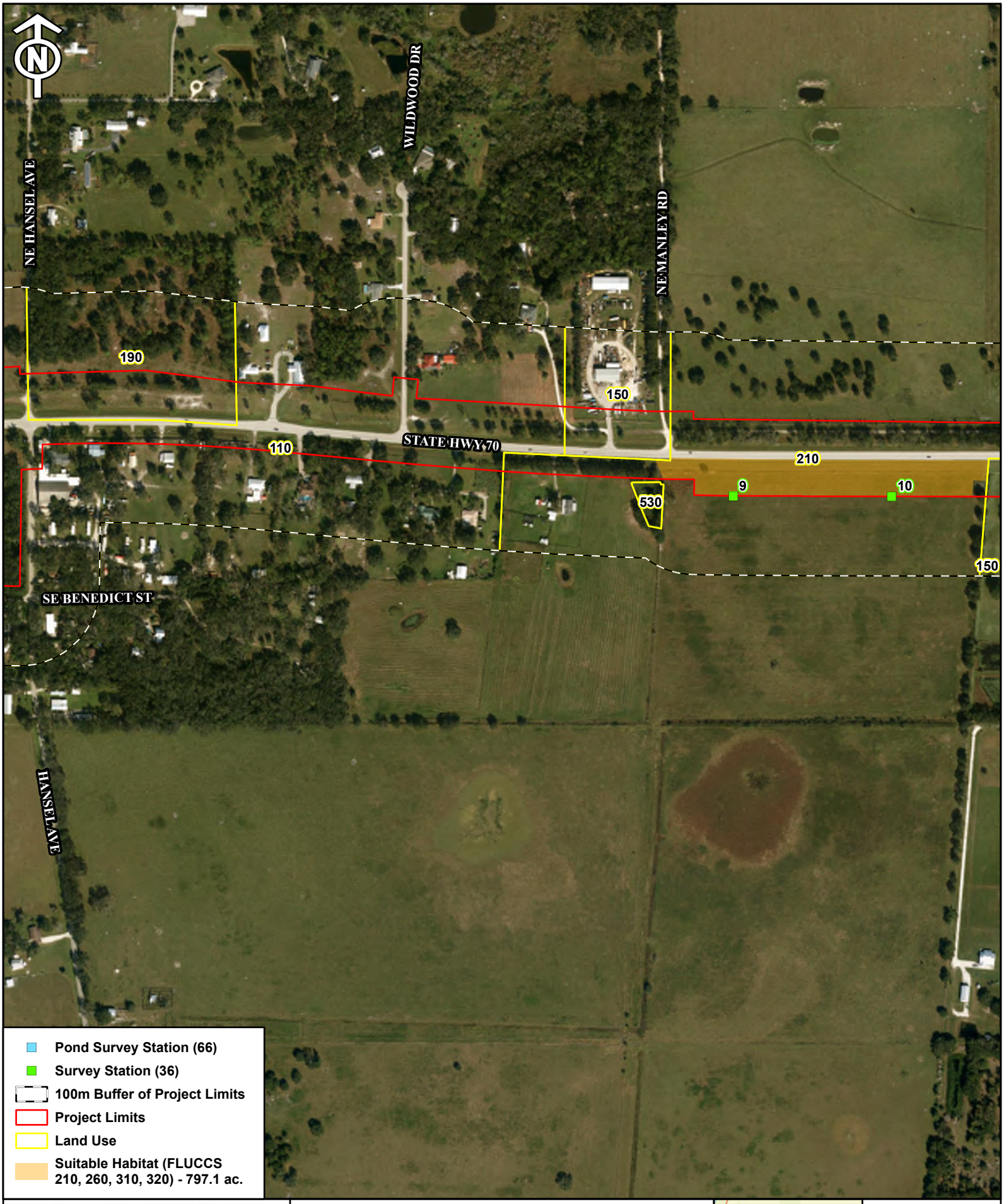
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 3 of 26

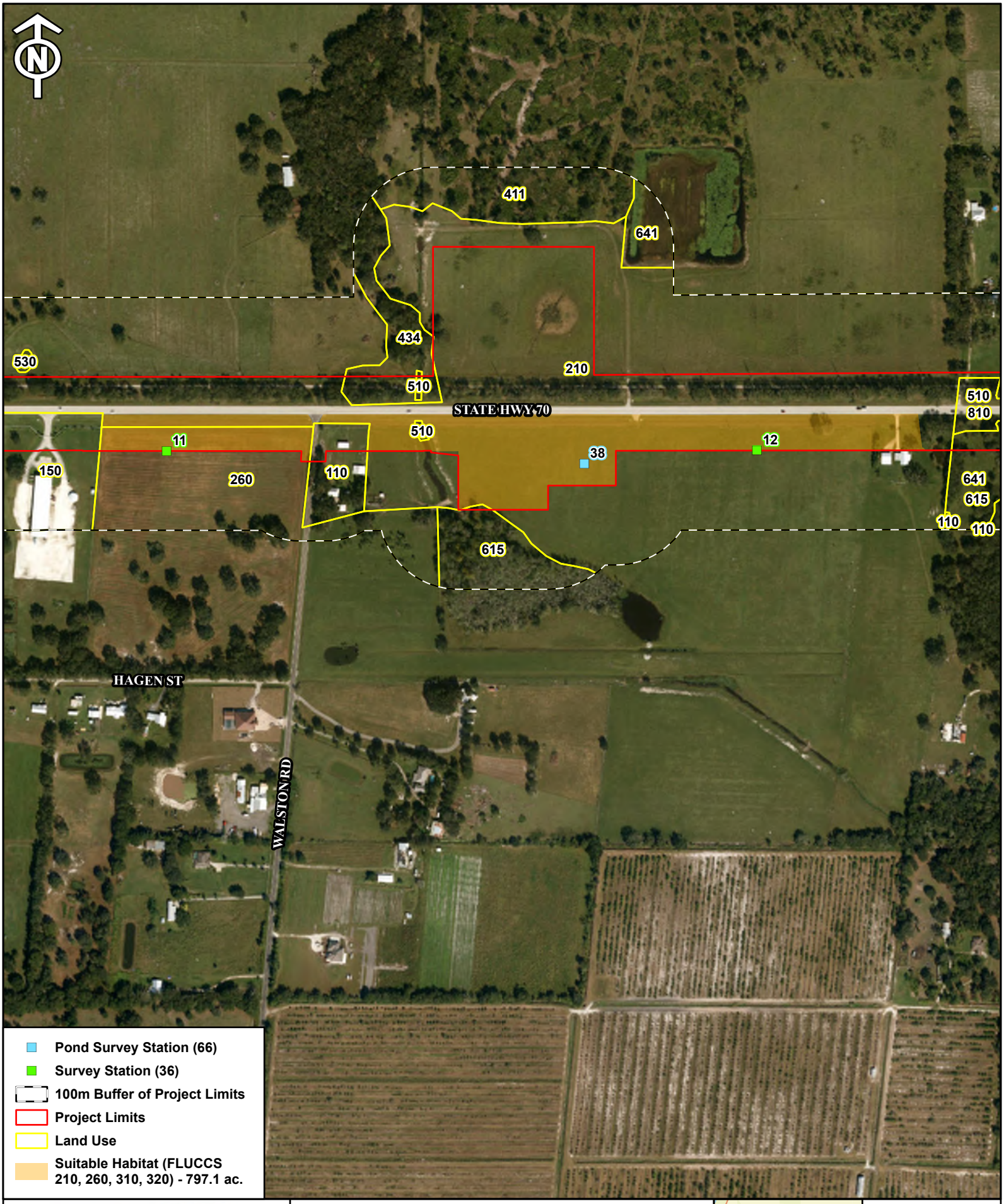
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 4 of 26

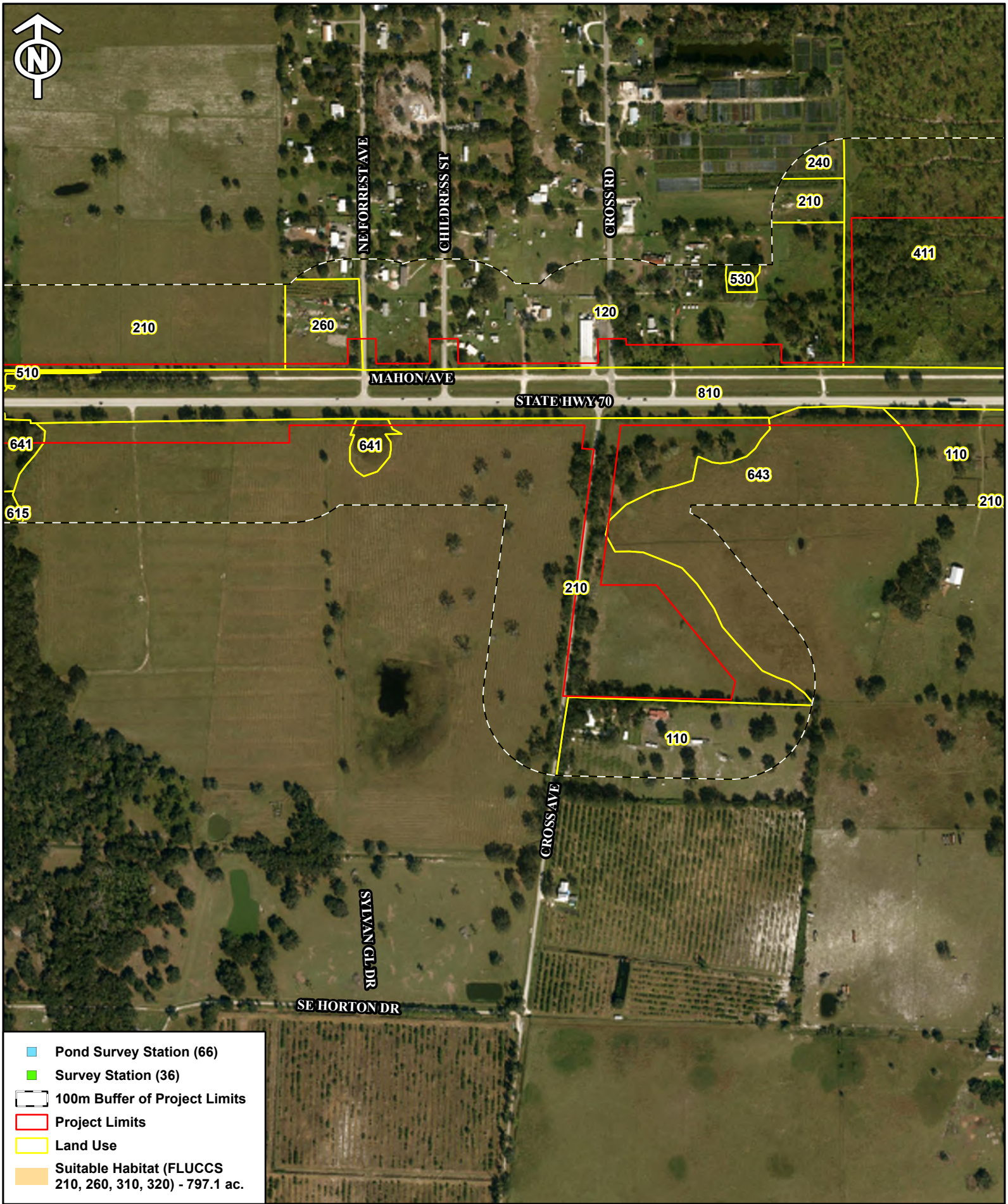
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 5 of 26

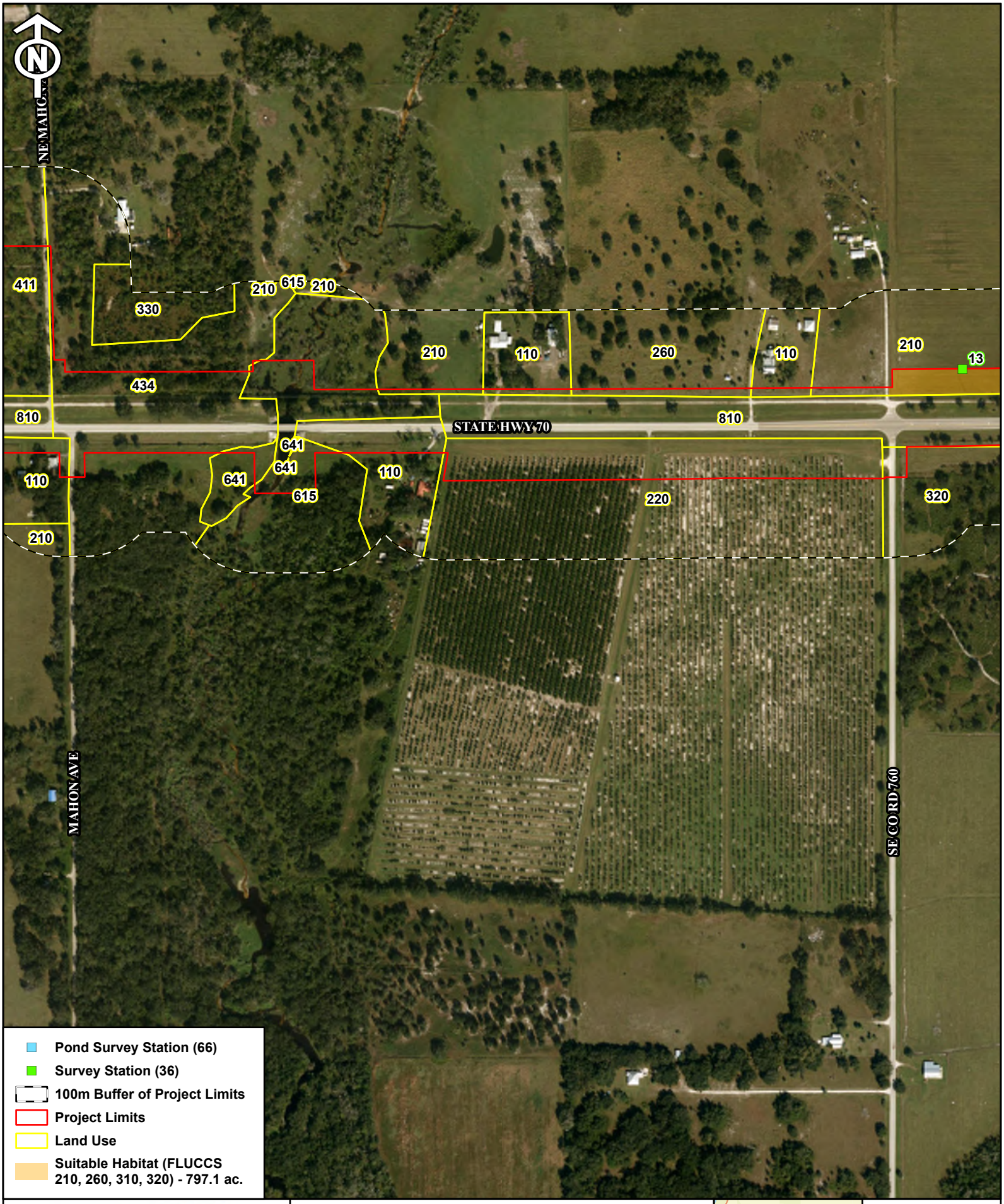
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 6 of 26

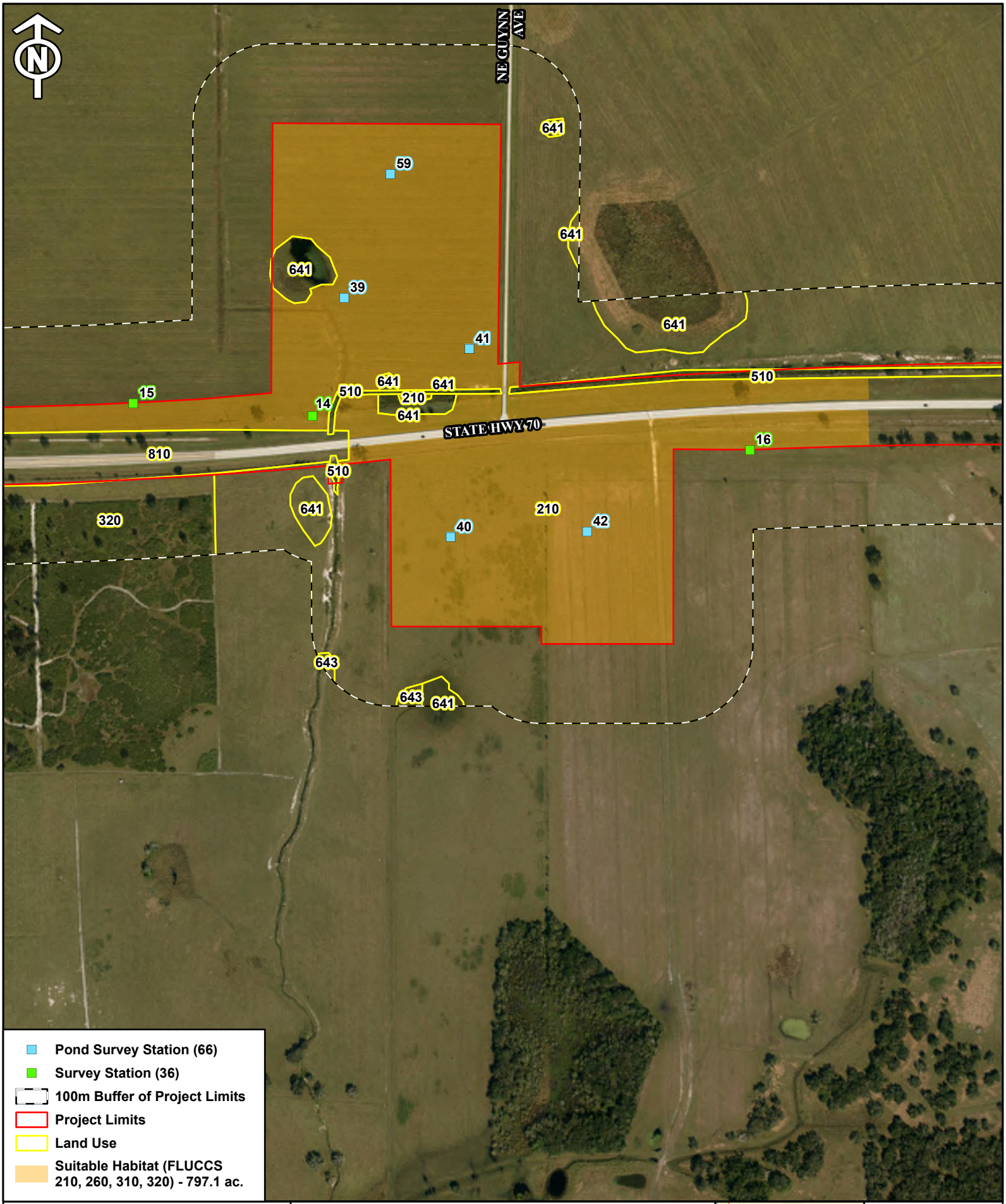
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 7 of 26

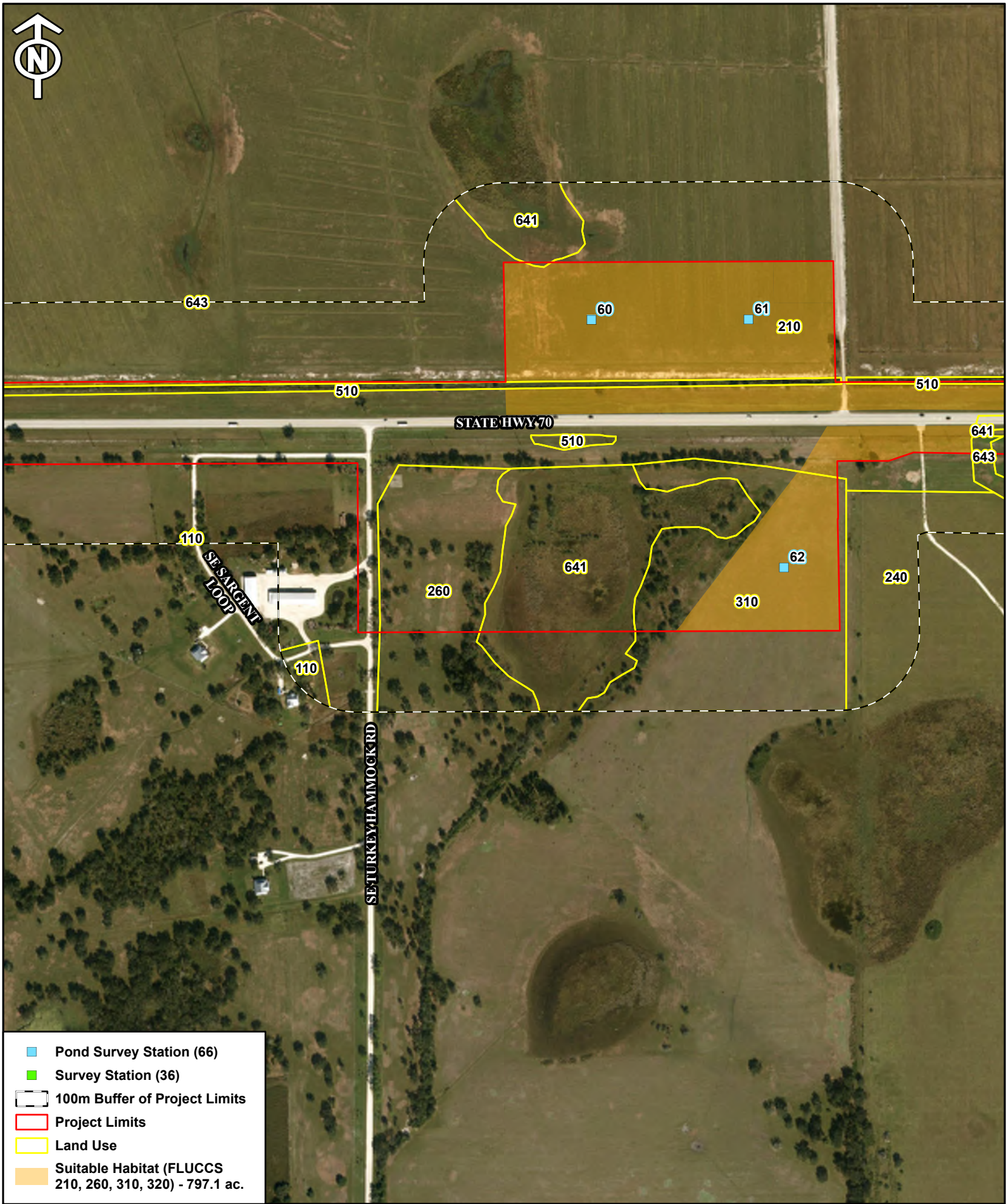
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 8 of 26

Feet
0 500
0 150
Meters



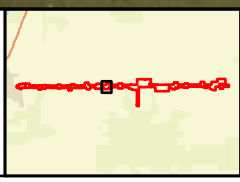
FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 9 of 26

Feet
0 500
0 150
Meters

FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 10 of 26



Feet
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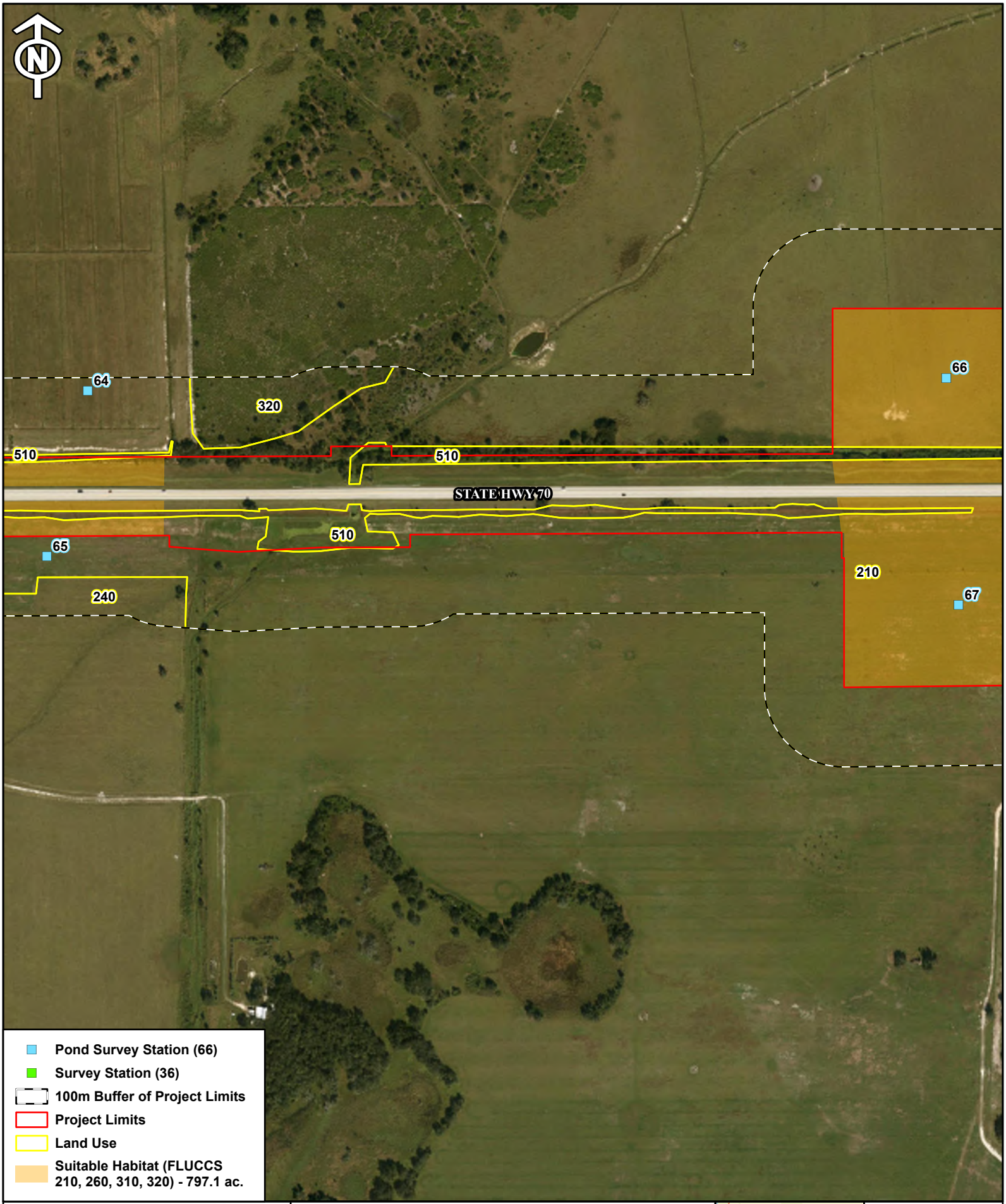
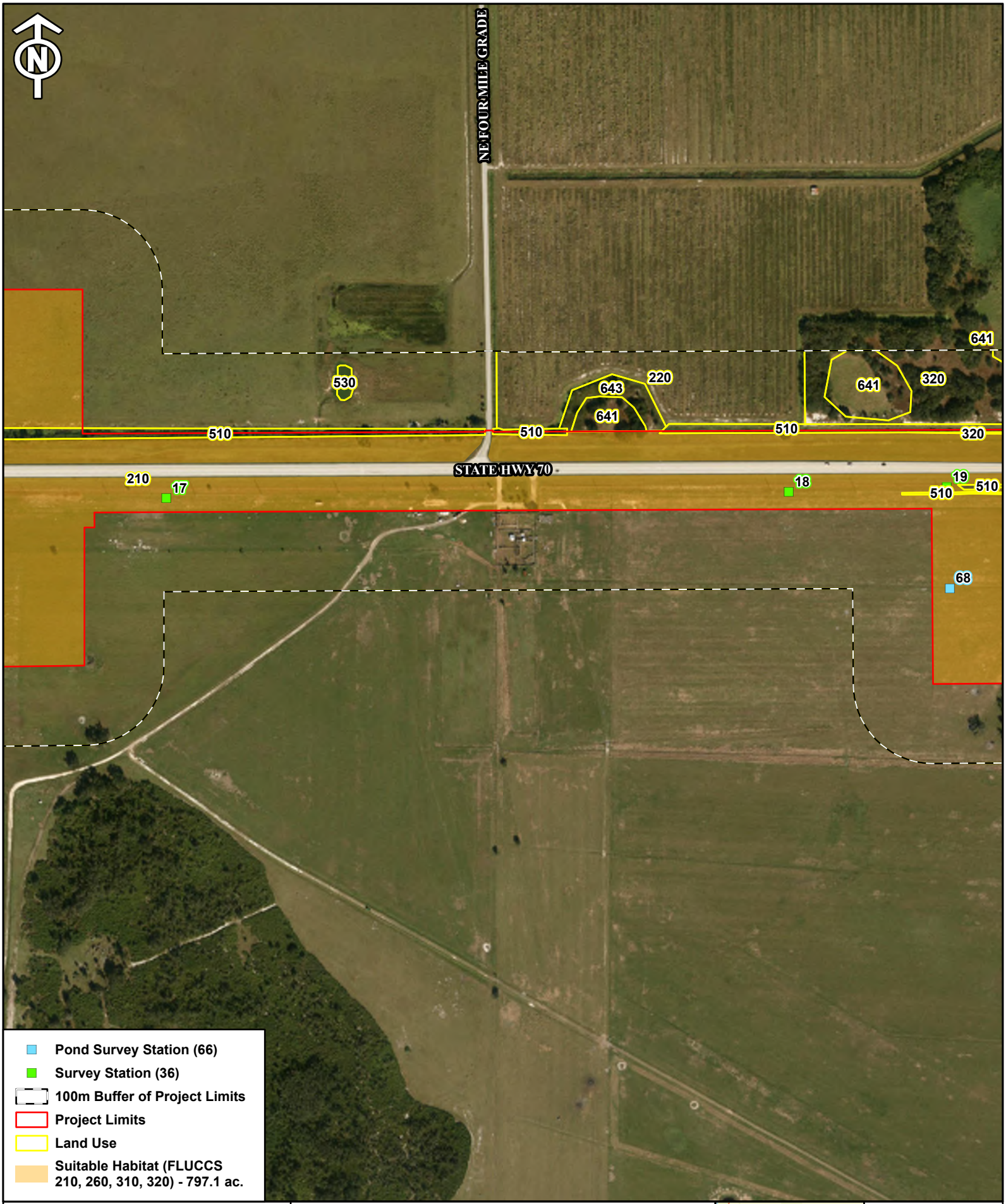
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 11 of 26

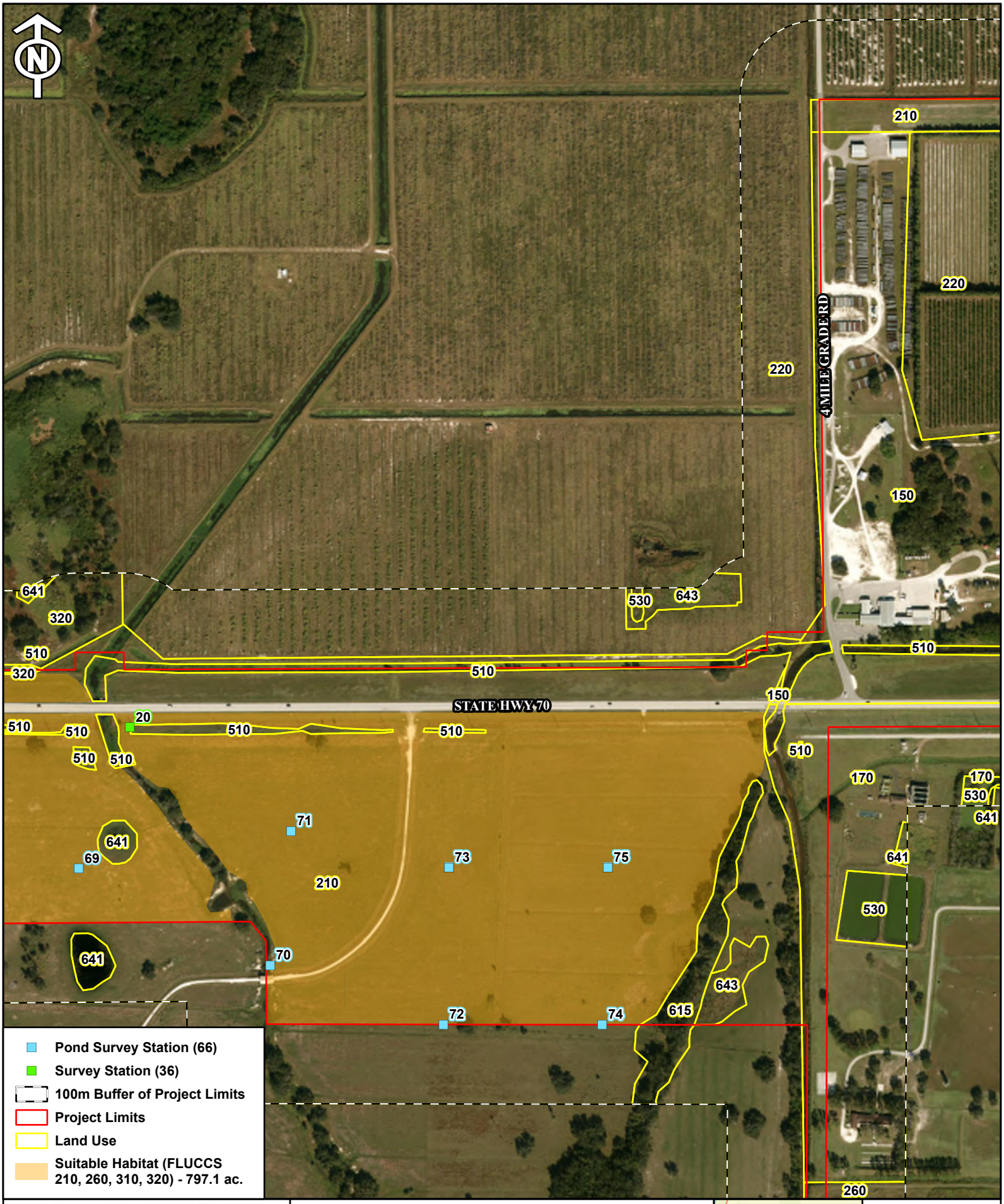
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 12 of 26

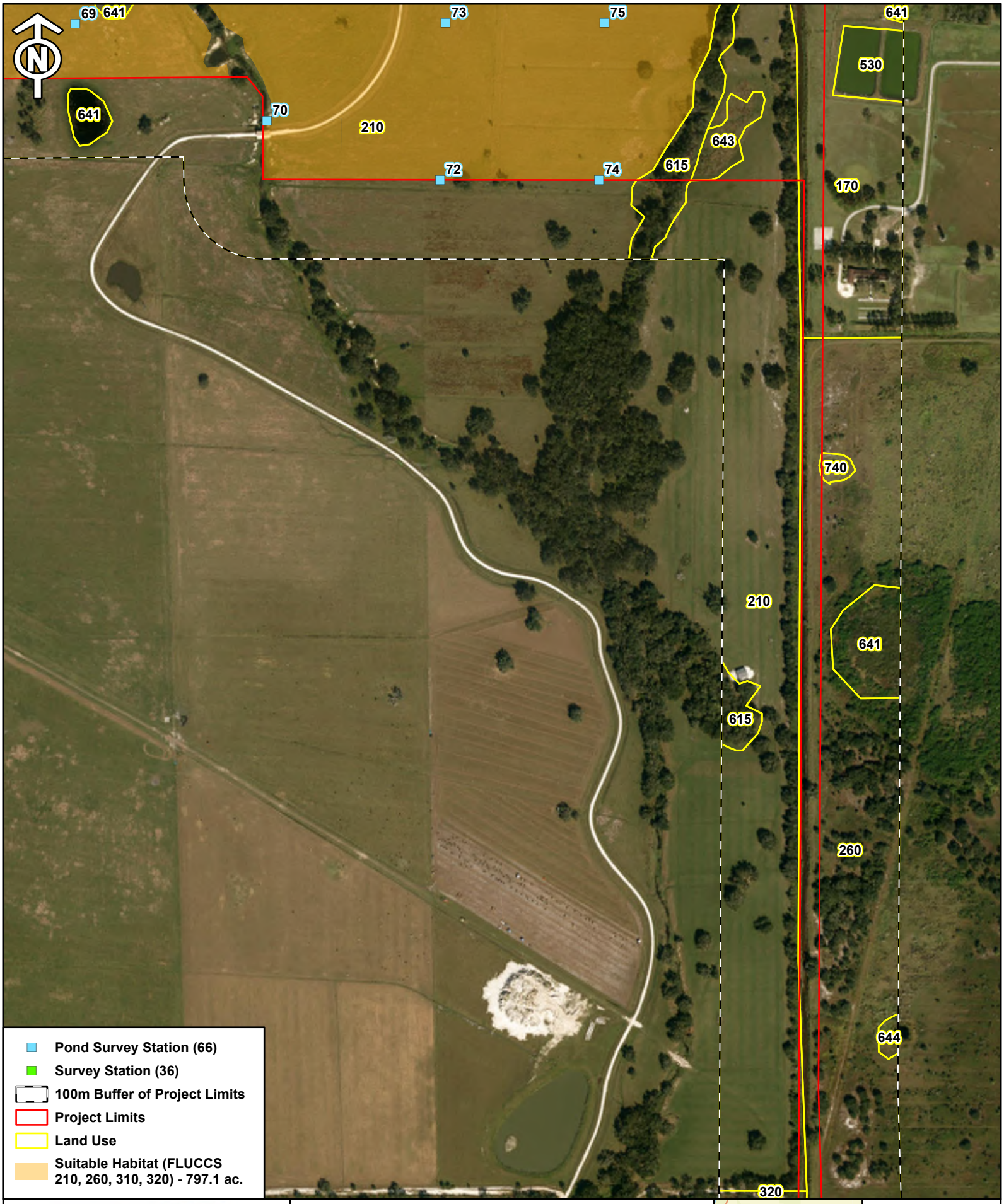
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 13 of 26

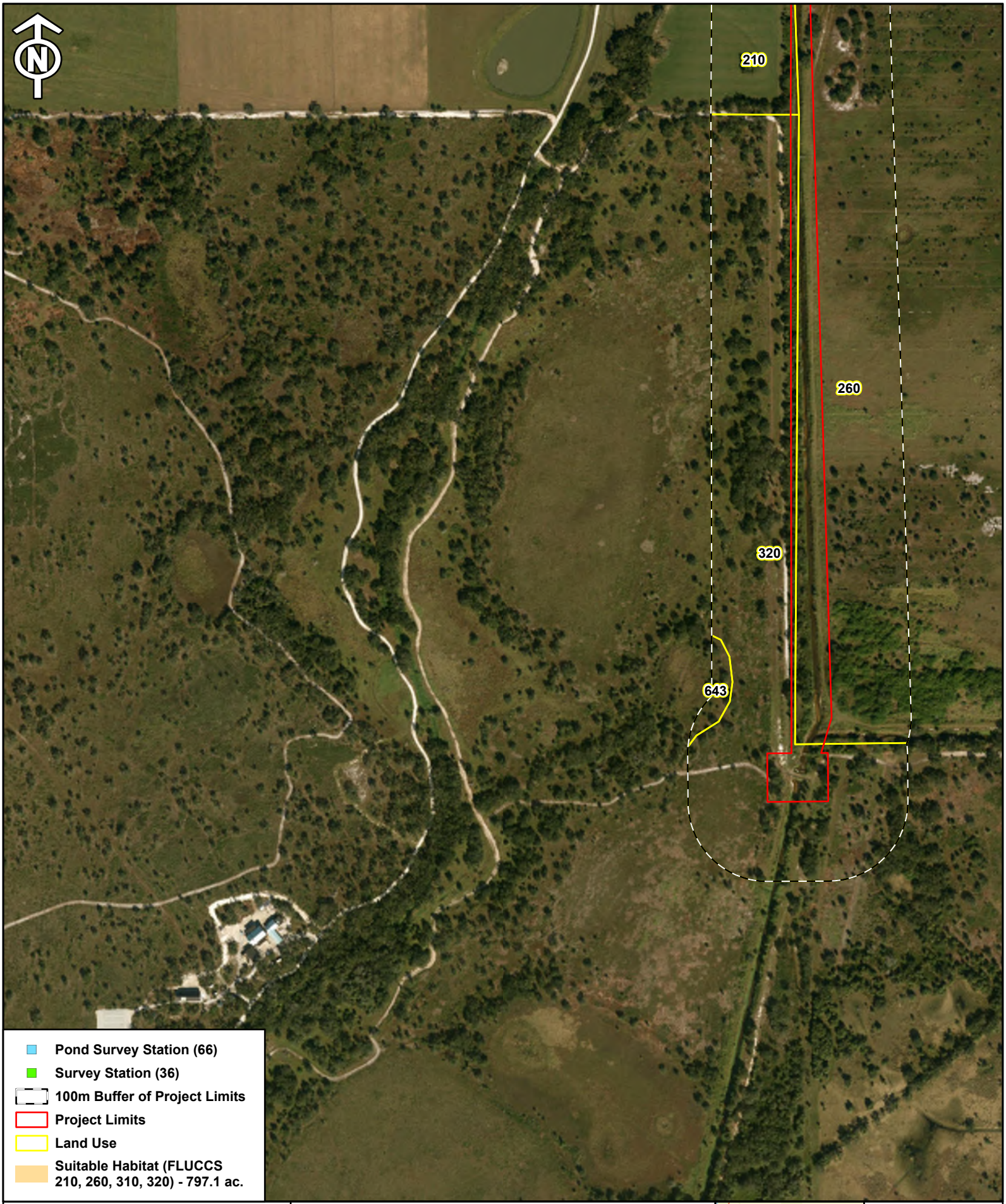
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 14 of 26

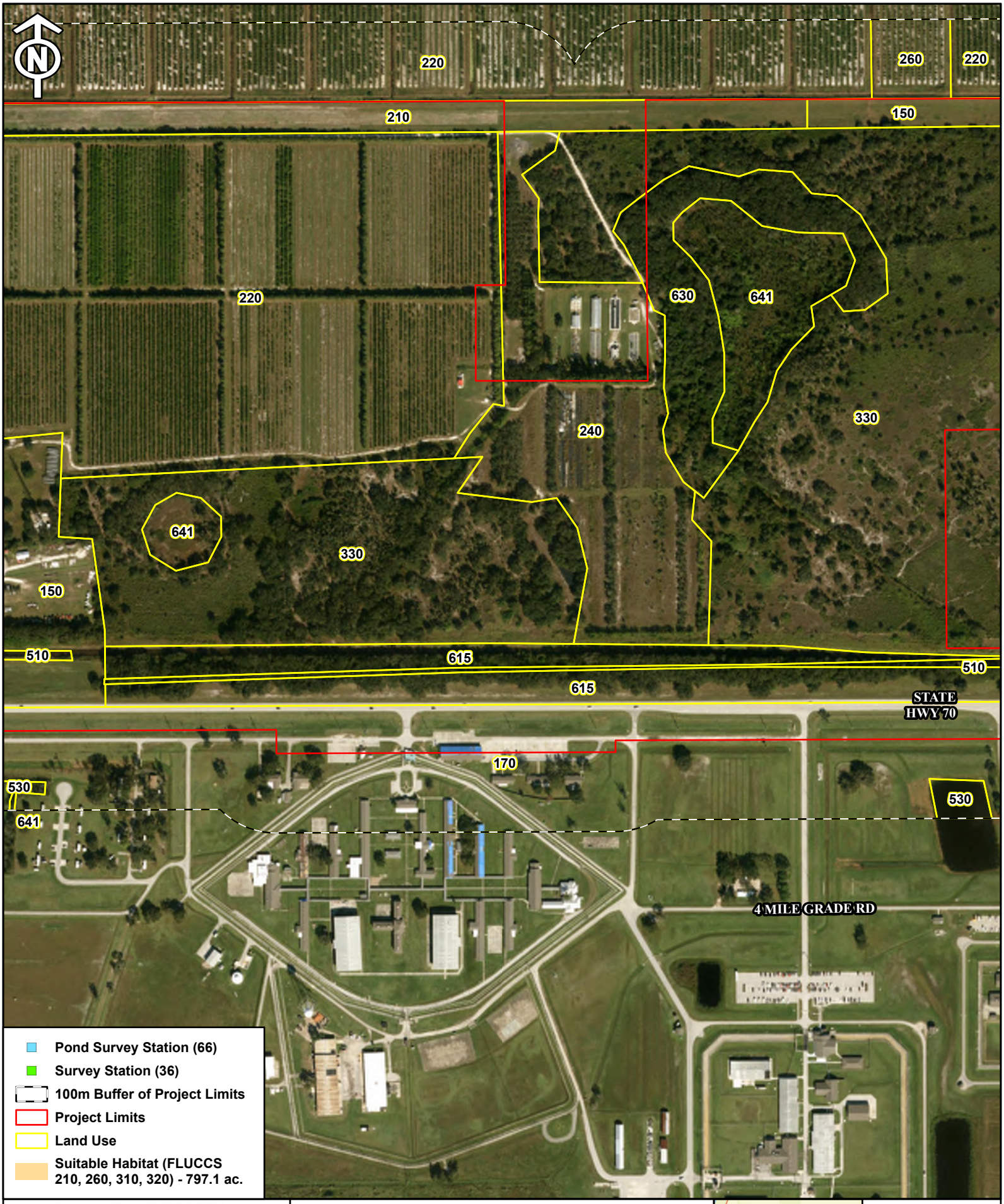
Feet
0 500
0 150
Meters



FDOT

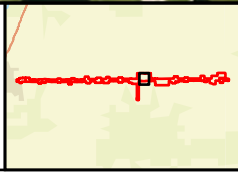
SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 15 of 26

Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 16 of 26



Feet
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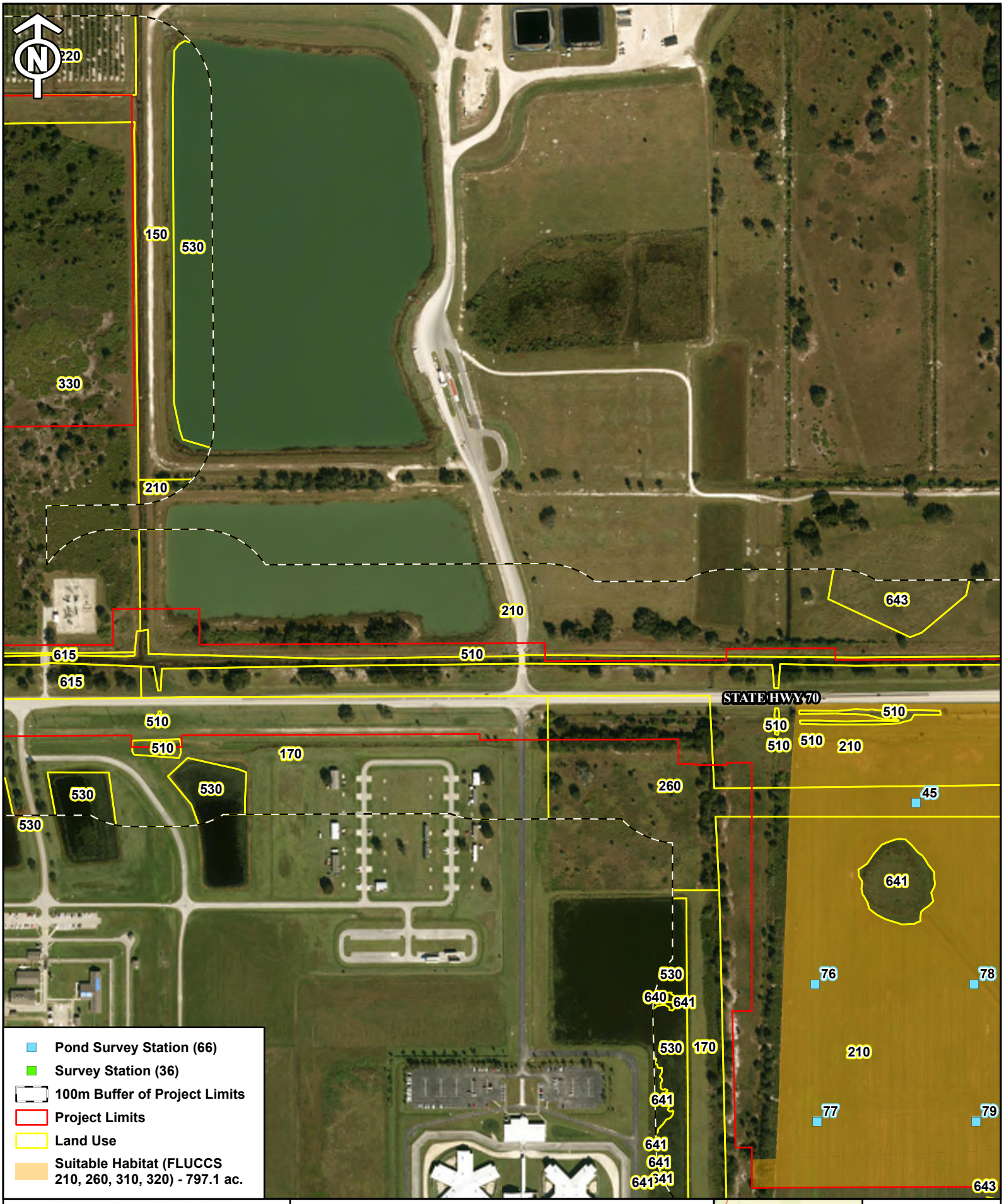
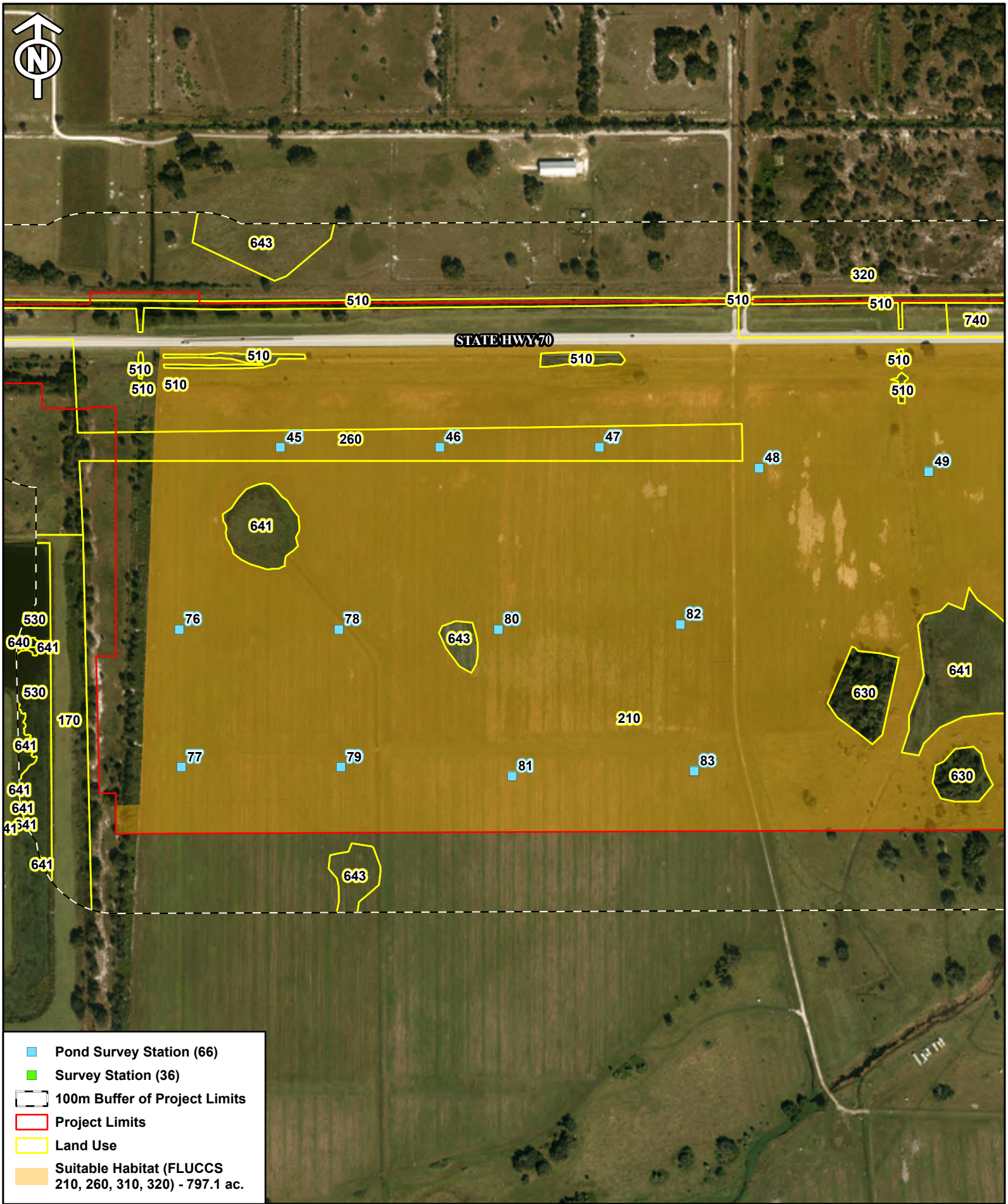
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 17 of 26

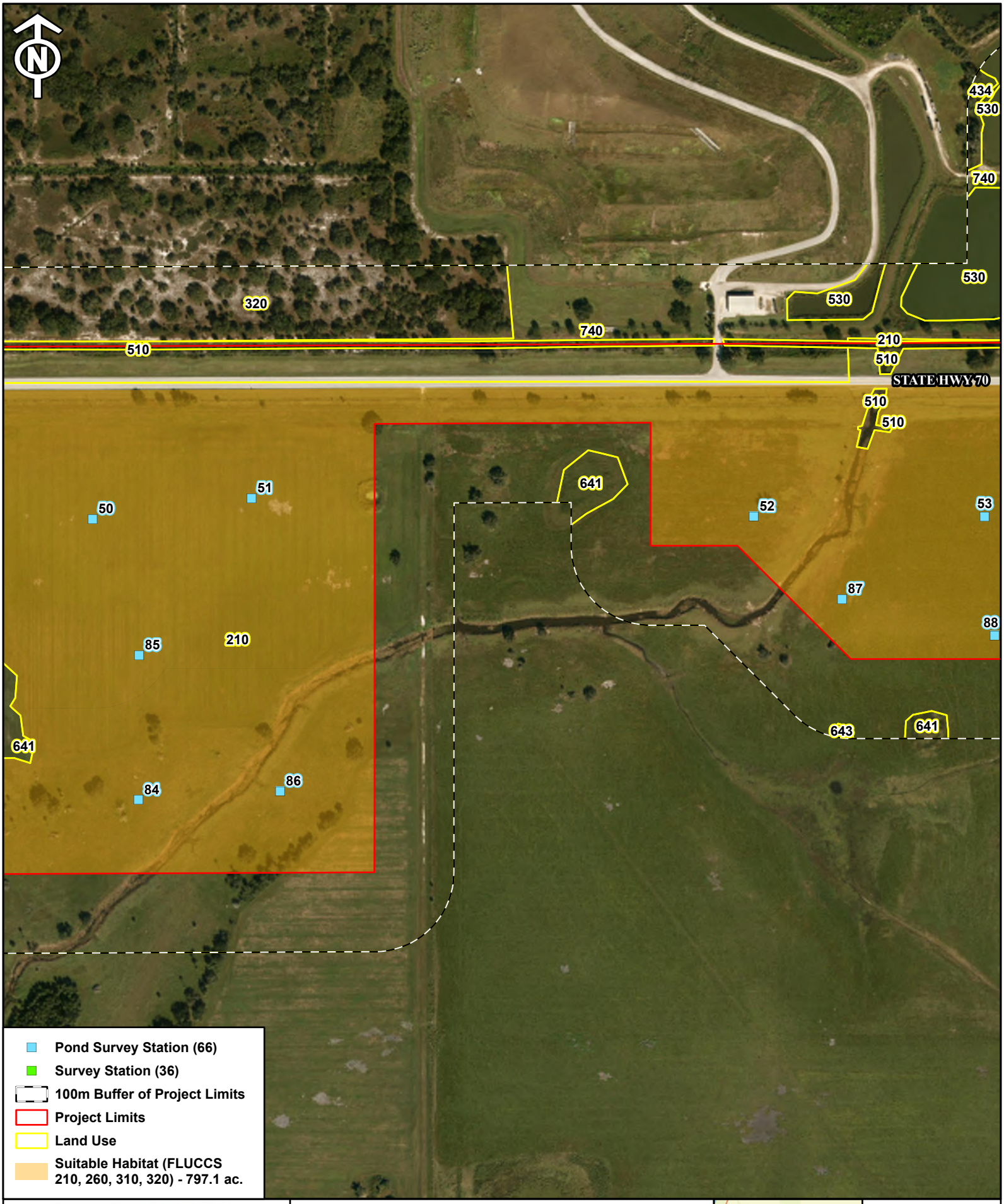
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 18 of 26

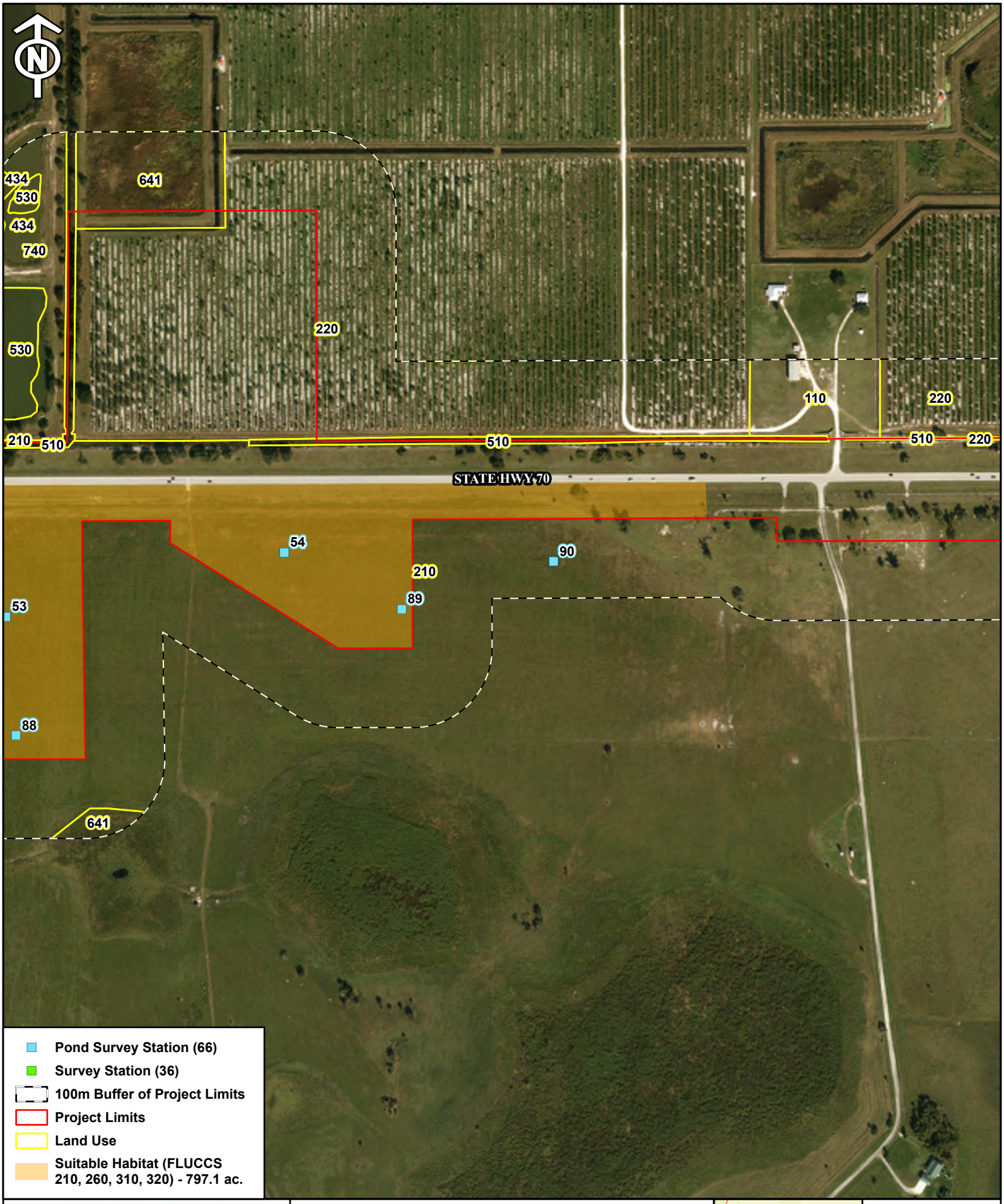
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 19 of 26

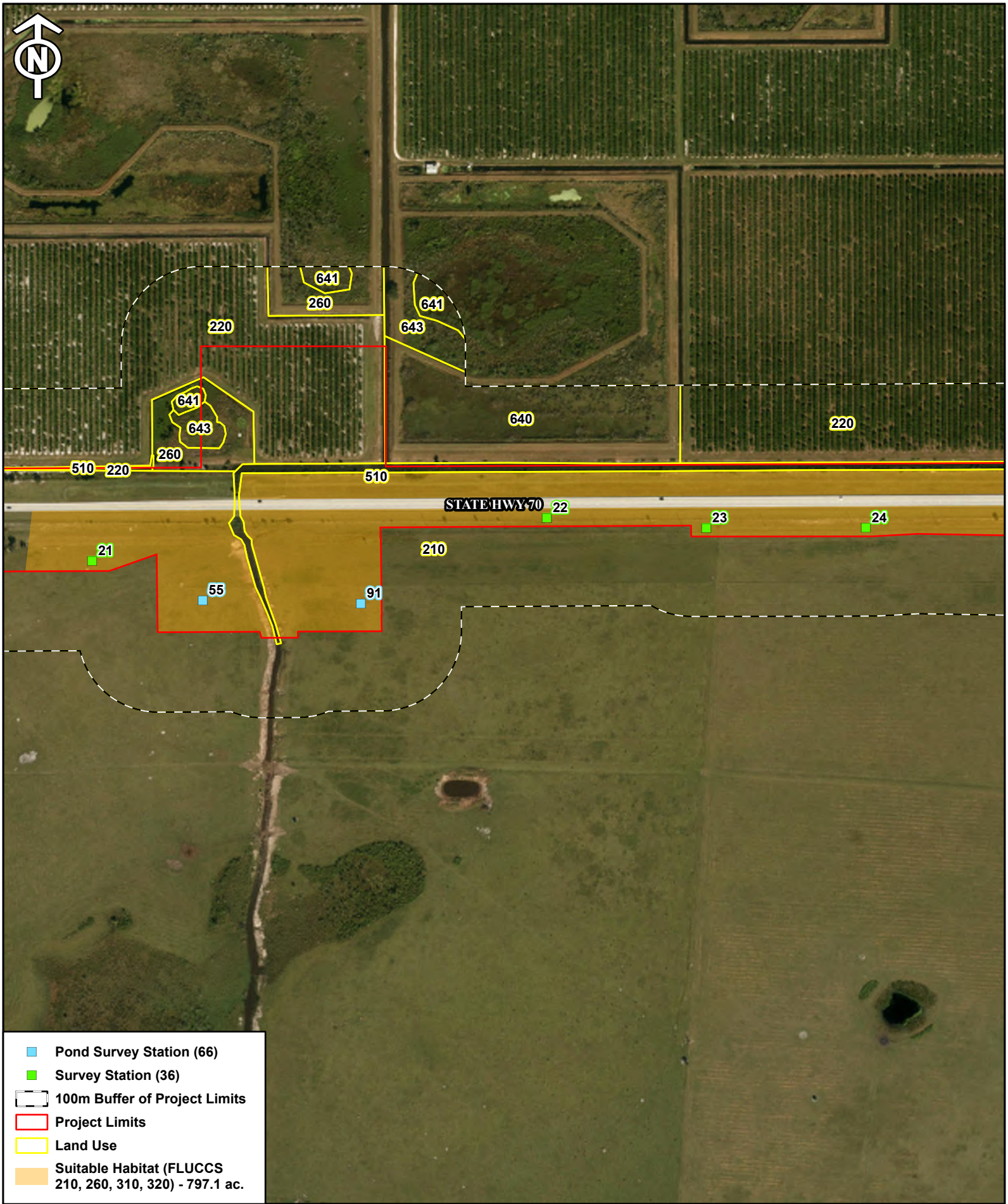
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 20 of 26

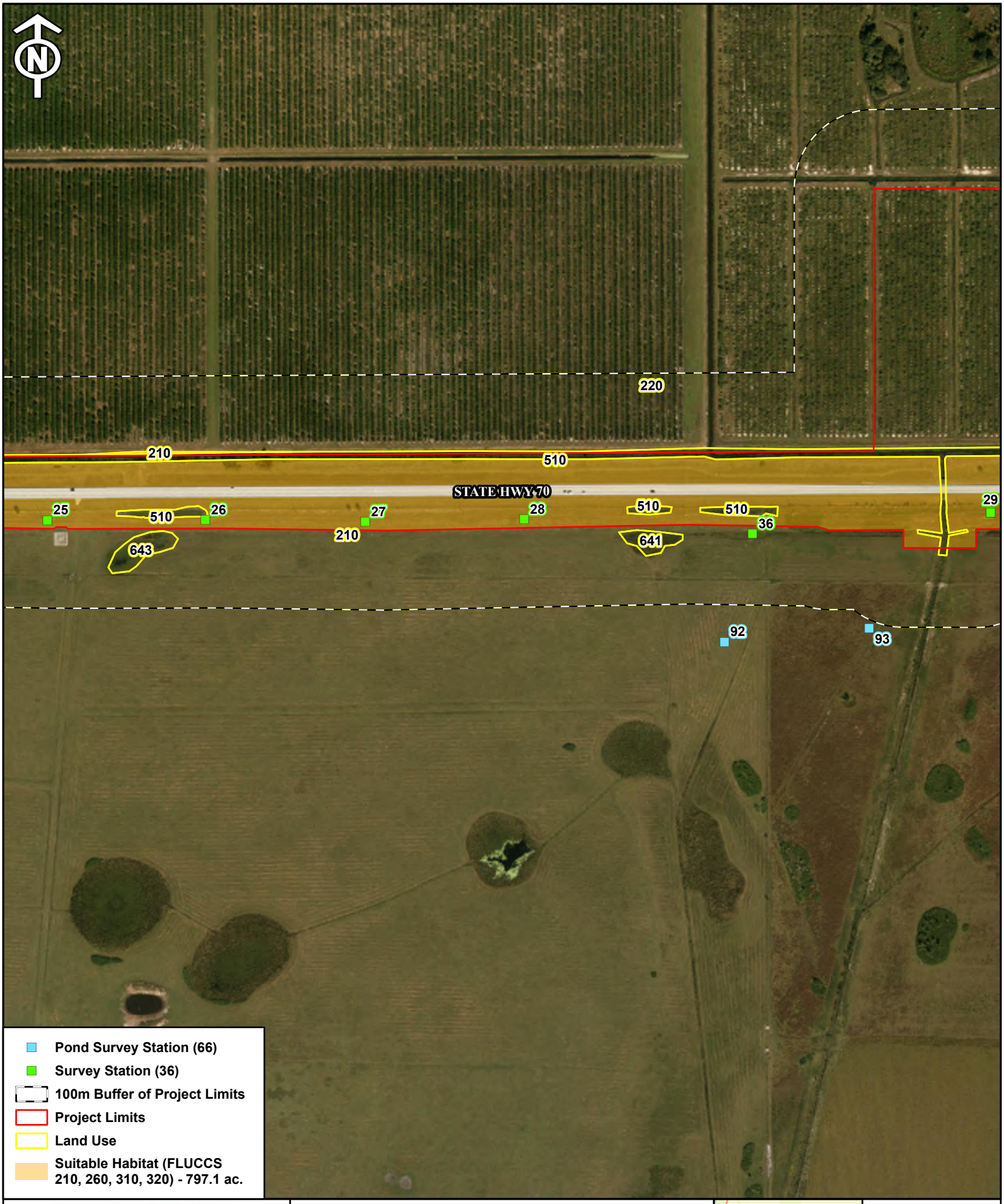
Feet
0 500
0 150
Meters



FDOT

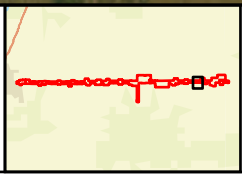
SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 21 of 26

Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 22 of 26



Feet
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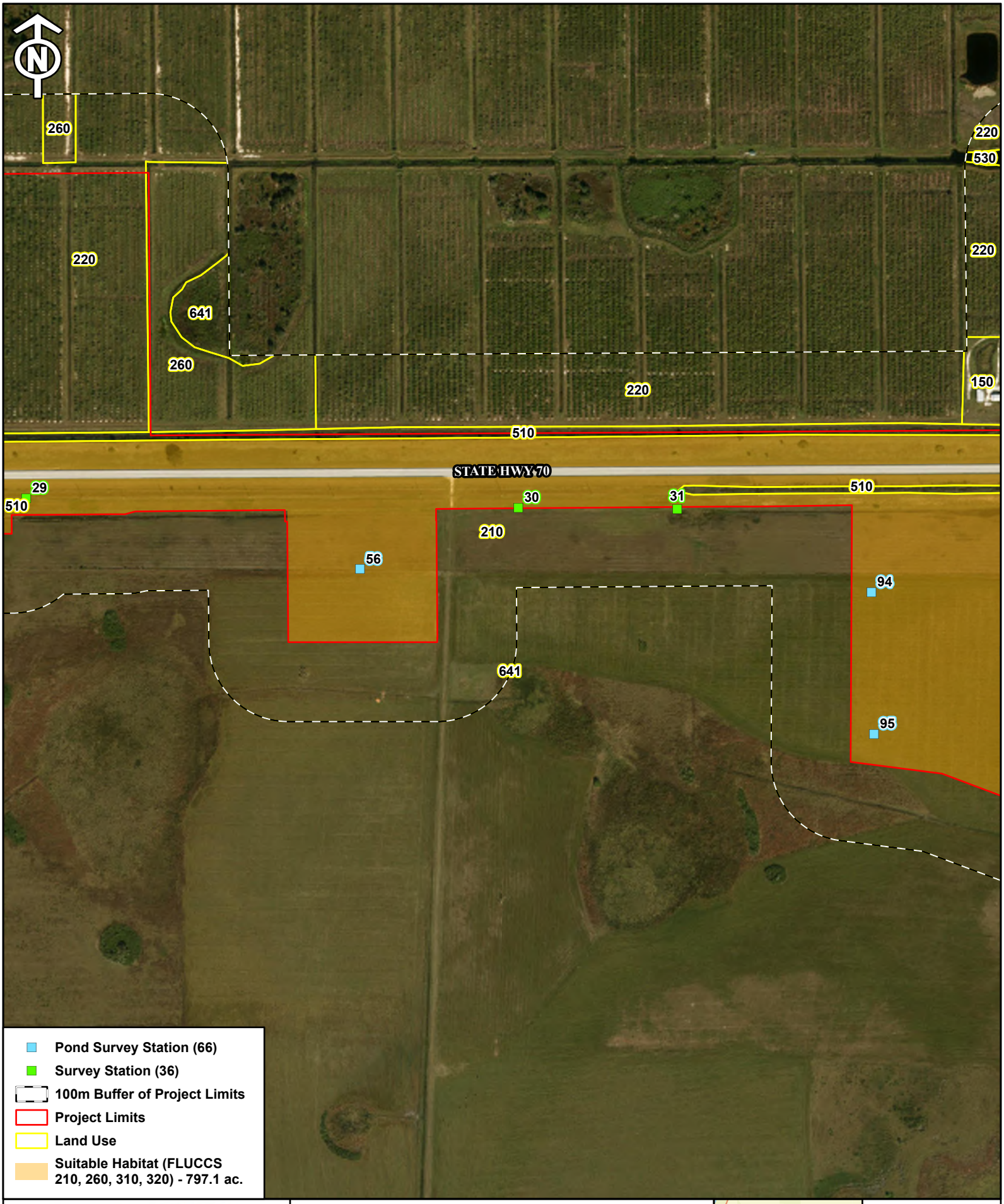
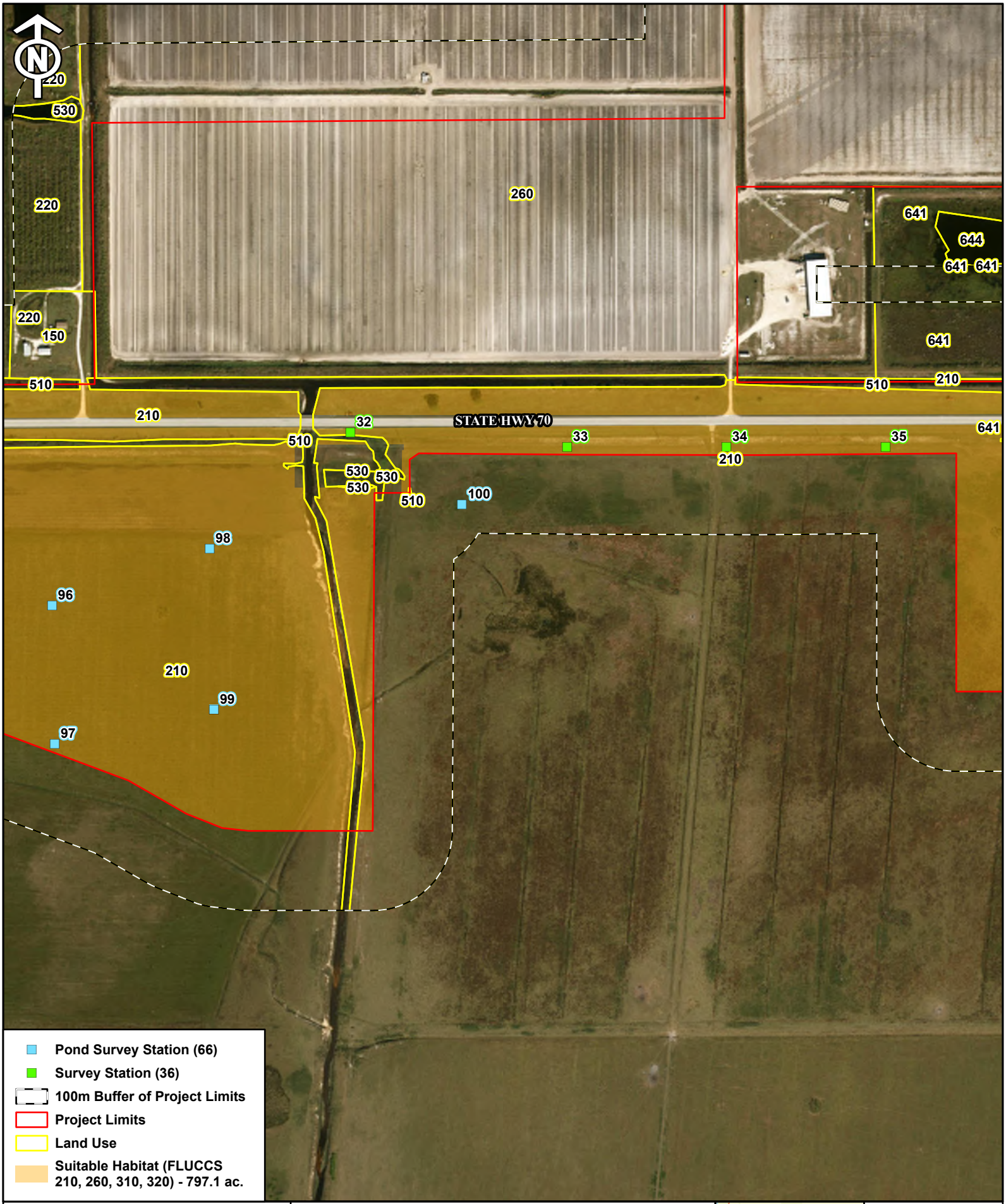
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 23 of 26

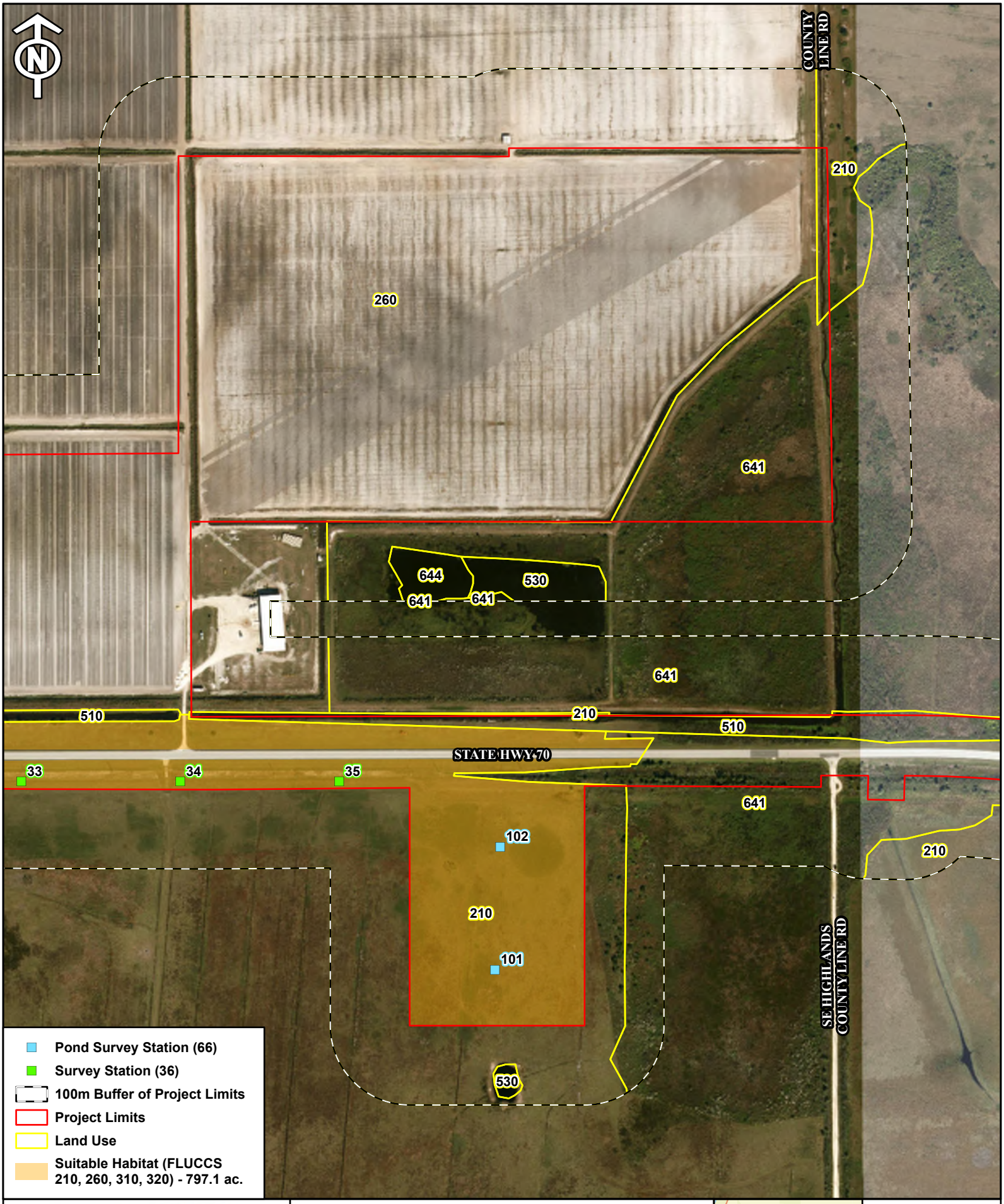
Feet
0 500
0 150
Meters



FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 24 of 26

Feet
0 500
0 150
Meters



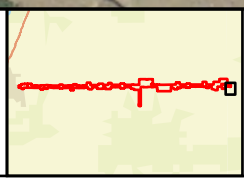
FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 25 of 26

Feet
0 500
0 150
Meters

FDOT

SR 70 FROM WEST OF SR 31 TO
SE HIGHLANDS COUNTY LINE ROAD
FPID: 451942-1-22-01
FLORIDA GRASSHOPPER SPARROW
SURVEY STATION MAP 26 of 26



Feet
0 500
0 150
Meters

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 1

Survey Station 2

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 3

Survey Station 4

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 5

Survey Station 6

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 7

Survey Station 8

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 9

Survey Station 10

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 11

Survey Station 12

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 13

Survey Station 14

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 15

Survey Station 16

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 17

Survey Station 18

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 19

Survey Station 20

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 21

Survey Station 22

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 23

Survey Station 24

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 25

Survey Station 26

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 27

Survey Station 28

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 29

Survey Station 30

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 31

Survey Station 32

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 33

Survey Station 34

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 35

Survey Station 36

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 37

Survey Station 38

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 39

Survey Station 40

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 41

Survey Station 42

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 43

Survey Station 44

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 45

Survey Station 46

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 47

Survey Station 48

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 49

Survey Station 50

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 51

Survey Station 52

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 53

Survey Station 54

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 55

Survey Station 56

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 57

Survey Station 58

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 59

Survey Station 60

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 61

Survey Station 62

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 63

Survey Station 64

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 65

Survey Station 66

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 67

Survey Station 68

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 69

Survey Station 70

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 71

Survey Station 72

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 73

Survey Station 74

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 75

Survey Station 76

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 77

Survey Station 78

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 79

Survey Station 80

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 81

Survey Station 82

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 83

Survey Station 84

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 85

Survey Station 86

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 87

Survey Station 88

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 89

Survey Station 90

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 91

Survey Station 92

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 93

Survey Station 94

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 95

Survey Station 96

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 97

Survey Station 98

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 99

Survey Station 100

Site Photographs

Project Name: SR 70 from West of SR 31 to SE Highlands County Line Road

FPID: 451942-1-22-01

Report: Florida Grasshopper Sparrow Survey Field Data

Survey Station 101

Survey Station 102

APPENDIX L

Bonneted Bat Specific Species Survey

memorandum

date	July 31, 2025
to	Zakia Williams, U.S. Fish and Wildlife Service
cc	Matthew Dockins, PE, HNTB Corporation James Fine, HNTB Corporation Shannon Freemon, Environmental Science Associates Tori Kuba, Environmental Science Associates
from	Alexandra Hipolito, Environmental Science Associates
subject	Florida Bonneted Bat and Tricolored Bat Acoustic Survey Technical Memorandum SR 70 from West of SR 31 to SE Highlands County Line Road FPID 451942-1-22-01 DeSoto and Highlands County, Florida

Introduction

The Florida Department of Transportation (FDOT) District One is conducting a Project Development and Environment (PD&E) Study, in accordance with the National Environmental Policy Act (NEPA), to evaluate various alternatives for the State Road (SR) 70 roadway improvement project from west of SR 31 to Southeast Highlands County Line Road located within DeSoto and Highlands Counties, Florida (**Figure 1**).

The project limits fall within the U.S. Fish and Wildlife Service (USFWS) Florida bonneted bat (*Eumops floridanus*) Consultation Area (CA) and within the range for the tricolored bat (*Perimyotis subflavus*). Based on the availability of potential roosting and foraging habitat and the project's size being greater than five acres, a species-specific Florida bonneted bat acoustic survey was determined to be necessary for this project. The tricolored bat was proposed for listing as an endangered species in 2022 (87 Federal Register 56381 56393). Although not yet listed, due to the project's location in the tricolored bat range and presence of suitable habitat, results of the acoustic survey will be analyzed for the presence of tricolored bats in addition to Florida bonneted bats.

Acoustic surveys were conducted in accordance with the 2024 USFWS Florida Bonneted Bat Consultation Guidelines and The Indiana Bat and Northern Long-eared Bat Survey Guidance (USFWS 2024a). A proposed survey methodology memorandum was submitted to the USFWS prior to the start of surveys and was approved on March 20, 2025. The Methodology Memorandum is included as **Appendix A**. Per guidance from the FDOT's Office of Environmental Management (OEM), the Florida Bonneted Bat Consultation Key, included in the USFWS 2019 Florida Bonneted Bat Consultation Guidelines, was used to evaluate potential effects to the species from the proposed project, and the USFWS 2024 Florida Bonneted Bat Consultation Guidelines were adhered to while conducting surveys. This report summarizes the methods and results of the species-specific acoustic surveys for the Florida bonneted bat and tricolored bat.

Species Information

Species and Habitat Description

Florida bonneted bat

The Florida bonneted bat has a body length of 84 to 108 millimeters (mm) (approximately 3.75 inches) with a wingspan of 490 to 530 mm (approximately 20 inches), making it the largest species of bat in Florida. Its fur color can range from a dark grey to reddish brown. A distinguishing characteristic of the Florida bonneted bat is its large, rounded ears that are joined at the midline of the forehead. There is no significant difference in size or appearance between males and females. Florida bonneted bat echolocations have a frequency range of 10-25 kilohertz (kHz).

Very little is known about the life history and ecology of the Florida bonneted bat. Natural roosting habitat for this species includes forested areas containing tall mature trees such as pine flatwoods, mixed or hardwood hammocks, wetland forested systems, and sand pine scrub. In these natural habitats, Florida bonneted bats may roost in tree snags, tree cavities, tree crevices, under loose bark, or other deformities of mature trees. Documented roosts have occurred in trees greater than six meters (20 feet) tall, with a diameter-at-breast height (DBH) of 20.3 centimeters (cm) (8 inches) and having cavities higher than 4.6 meters (15 feet) above ground. Florida bonneted bats have also been documented roosting in urban/suburban areas. Roosts have been documented to occur in the fronds of royal palm (*Roystonea regia*) trees, tree cavities, underneath Spanish tile roofs, in attics, rock or brick chimneys of buildings, cavities in utility poles, and manmade bat houses.

This species can cover large areas when foraging. Studies at the Babcock-Webb Wildlife Management Area (WMA) conducted with Florida bonneted bats fitted with Global Positioning System (GPS) satellite tags documented the maximum distance detected from a capture site was 24.2 miles and the longest path traveled in a single night was 56.3 miles. In a sample size of eight individuals, Florida bonneted bats were documented traveling a mean maximum distance of 9.5 miles from the roost.

Tricolored bat

The tricolored bat measures around 3.5 inches and is the smallest bat in the eastern United States. The tricolored bat is identified as having a dark base, yellowish midsection, and a dark tip. The overall color is yellow-tan with a harlequin appearance. The forearm skin is reddish, contrasting with a black membrane.

Tricolored bats are found throughout Florida, except the Florida Keys. During the winter, tricolored bats are found in caves and mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts. During the spring, summer and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves. They utilize a variety of roosting structures including live or recently dead trees, buildings, and crevices in cliffs and rocks. The small, insect-eating bats prefer to roost in mature hardwood forests, caves, and less commonly manmade structures. Tricolored bats forage in waterways, forests, and agricultural areas where small insects can be found.

In addition to habitat loss and climate change, white nose syndrome (WNS) is a major contributor to the decline of this species and is listed as the main reason for the proposed listing. WNS is a fungal disease characterized by a white growth appearing on the muzzle and wings of hibernating bats. It has led to 90 to 100% declines in tricolored bat winter colony abundance at sites impacted by the disease. Since white-nose syndrome was first observed in

New York in 2006, it has spread rapidly across the majority of the tricolored bat range. No WNS cases have been reported in Florida. However, its effects on populations in other states have the potential to affect tricolored bat populations in Florida.

Status

Florida bonneted bat

The Florida bonneted bat is listed as a federally designated endangered species by the USFWS and is protected by the Endangered Species Act, as amended (16 U.S. Code (U.S.C.) 1531-1544, 87 Stat. 884). In June 2020, the USFWS proposed draft language for designation of critical habitat (CH) for the species. Following a public comment period and in response to new information, the USFWS revised the proposed rule designating CH in November 2022 and made the rule available for public comment through January 23, 2023. The revised rule includes nine CH units (Kissimmee, Peace River, Babcock, Fisheating Creek, Corkscrew, Big Cypress, Everglades Tree Islands, Long Pine Key, and Miami Rocklands) covering portions of 13 counties. On March 7, 2024, the USFWS officially designated the nine CH units for the Florida bonneted bat (2024 Federal Register Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Endangered Florida Bonneted Bat). The SR 70 project does not fall within the CH. The western project limit is approximately 12 miles northeast of the northern portion of the Florida bonneted bat Unit 4 CH polygon. The project also does not fall within any assumed presence polygons identified within the guidelines.

Florida bonneted bats are unique from other bat species in Florida because they are reproductively active through most of the year, and their large size makes them capable of foraging long distances from their roost. Consequently, this species is vulnerable to disturbances around the roost during the greater portion of the year and considerations about foraging habitat extend further than the localized roost. Furthermore, impacts to their foraging habitat can also have adverse effects, even if the impacts are located a significant distance from their roosts.

Tricolored bat

On September 13, 2022, the USFWS announced a proposal to list the tricolored bat as endangered under the Endangered Species Act (ESA). The Service developed final tools and guidance documents for the endangered northern long-eared bat and the proposed endangered tricolored bat, included in the USFWS Northern Long-eared Bat and Tricolored Bat Voluntary Environmental Review Process for Development Projects (USFWS 2024b). However, guidance was adopted between the USFWS and FDOT OEM in January 2025 to provide additional directions for FDOT staff and consultants regarding effect determination, project consultation, documentation within various reports and permit applications for the tricolored bat. This guidance includes reference to the use of the USFWS Indiana Bat and Northern Long-eared Bat Survey Guidance (USFWS 2024a) for habitat assessment and survey protocol when determining procedures that will be followed for FDOT projects in preparation for potential listing for the tricolored bat. In the event that the tricolored bat is listed as endangered under the ESA, these tools would be applicable to both species. Designated CH is not proposed for the tricolored bat at this time.

Per the USFWS 2024 Florida Bonneted Bat Consultation Guidelines, when surveying for both the Florida bonneted bat and tricolored bat, surveys are only valid if conducted March 1 to October 15.

Methodology

Desktop Data Collection

A comprehensive literature and Geographic Information System (GIS) database search was conducted for the project area to determine if the Florida bonneted bat was previously documented within the project limits and if suitable roosting or foraging habitat was available. The literature and database search included the following: 2017-2019 South Florida Water Management District (SFWMD) Land Use Land Cover spatial data, 2023 USFWS National Wetlands Inventory (NWI) spatial data, USFWS Florida Bonneted Bat Consultation Area spatial data, 2024 USFWS Florida Bonneted Bat Consultation Guidelines, 2019 USFWS Florida Bonneted Bat Consultation Key, 2024 Federal Register Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Endangered Florida Bonneted Bat, and current aerial imagery.

Based on this preliminary protected species data collection effort, Florida bonneted bat and tricolored bat findings include the following:

- The project falls within the USFWS Florida bonneted bat Consultation Area (CA);
- The project does not fall within a USFWS Florida bonneted bat assumed presence polygon;
- The project does not fall within a USFWS Florida bonneted bat Critical Habitat (CH) polygon,
- The project falls within the USFWS range for the tricolored bat; and
- Potentially suitable foraging and roosting habitat was identified within the project boundary for both species.

Field Surveys

The Florida bonneted bat acoustic surveys followed the protocol documented in the 2024 USFWS Florida Ecological Services Office - Florida Bonneted Bat Consultation Guidelines (USFWS 2024) in conjunction with the Indiana Bat and Northern Long-eared Bat Survey Guidance Appendix J for year-round acoustic surveys. For linear projects that contain potential roosting and foraging habitat and that are also greater than five acres in size, the SR 70 project mainline requires surveys for a minimum of nine detector nights per 0.6 miles. A total of thirty-seven (37) acoustic monitoring stations were developed based on the guidelines, project length, and evaluation of habitat within the project area.

Per the Guidelines, the following weather conditions are required to be met for the first five hours of each survey night:

- Temperature at or above 60 degrees Fahrenheit;
- Precipitation events, including rain and/or fog cannot exceed 30 minutes in length or continue intermittently during the first five hours; and
- Sustained wind speeds cannot be greater than nine miles per hour for 30 minutes or more.

Qualified biologists conducted three (3) deployment efforts to set up the 37 detectors for the acoustic survey. The first deployment included Stations 30-37, and the acoustic survey took place from May 15-26, 2025. The second deployment included Stations 1-2 and 7-29, and the acoustic survey was conducted from May 29 to June 11, 2025; however, deployment days were staggered due to the number of detectors. The third deployment included Stations

3-6, and the acoustic survey took place from June 16-30, 2025. The acoustic survey station locations are depicted in **Figure 2**. Representative photos of the acoustic survey stations are provided in **Appendix B** and the survey locations and dates for each survey station are provided in **Table 1.**

Due to unfavorable weather conditions, the first deployment totaled eleven (11) nights, the second deployment totaled thirteen (13) nights, and the third deployment totaled fourteen (14) nights. Per the 2024 Florida Bonneted Bat Consultation Guidelines, if detectors are deployed for longer than 14 nights, coordination with the Florida bonneted bat recovery lead would be required. Coordination with USFWS personnel took place on June 5, 2025. During the meeting it was confirmed that it was acceptable to utilize data gathered over nine non-consecutive nights with a duration exceeding 14 nights.

To maximize the detection of Florida bonneted bats and tricolored bats, each monitoring station was placed in an area that could be used as a potential flight path for the bat species. This includes targeting areas which may provide potential roosting or foraging habitat such as a cluster of pine trees, a section of cypress swamp/dome, an area with snags, or a water feature. At each monitoring station, a Wildlife Acoustics Song Meter SM4BAT Full Spectrum (FS) acoustic detector was deployed by qualified biologists who are trained and experienced in setting up, operating, and maintaining bat acoustic detection equipment. The detectors were set to record 15-second file lengths and have a two-second trigger window based on training received from industry experts and the current 2024 USFWS Florida Bonneted Bat Consultation Guidelines and USFWS Indiana Bat and Northern Long-eared Bat Survey Guidance (2024). Each detector was set to automatically begin collecting data continuously from 30 minutes before sunset to 30 minutes after sunrise for nine nights at each station.

At each monitoring station, an omnidirectional Wildlife Acoustic SMM-U2 External Ultrasonic Microphone, placed on an extendable pole approximately 10 feet in height, was deployed. A minimum distance of 300 meters was maintained between deployed detectors. The microphone was situated in an area clear of vegetation two meters in all directions and was fully free of vegetative or other clutter from ground to sky. Microphones were directed away from surrounding vegetation, electrical wires and transmission lines, echo-producing surfaces including open water, and away from potential external noise sources. Metadata for each detector, consistent with the Acoustic Detector Deployment Example Data Sheet included in the 2024 USFWS Florida Bonneted Bat Consultation Guidelines, was documented. Data sheets for each acoustic survey station are included as **Appendix C**.

TABLE 1
EQUIPMENT DEPLOYMENT DETAILS

Station	Latitude	Longitude	Deployment Dates (2025)	Notes
1	27.208780 ºN	81.836214 ºW	5/30/2025 (PM) – 6/11/2025 (AM)	Weather conditions met criteria on survey dates May 30-31 and June 1-10, 2025.
2	27.210050 ºN	81.828681 ºW		
3	27.208675 ºN	81.819496 ºW	6/16/2025 (PM) – 6/30/2025 (AM)	Weather conditions met criteria on survey dates June 20-21, 23-29.
4	27.208589 ºN	81.810455 ºW		
5	27.208804 ºN	81.801565 ºW		
6	27.208568 ºN	81.791357 ºW		
7	27.208514 ºN	81.782692 ºW	5/30/2025 (PM) – 6/11/2025 (AM)	Weather conditions met criteria on survey dates May 30-31 and June 1-10, 2025.
8	27.208548 ºN	81.774864 ºW		
9	27.208553 ºN	81.766163 ºW		
10	27.208628 ºN	81.758318 ºW		
11	27.208619 ºN	81.749201 ºW	5/29/2025 (PM) – 6/11/2025 (AM)	Weather conditions met criteria on survey dates May 29-31 and June 1-10, 2025.
12	27.209668 ºN	81.740404 ºW		
13	27.208914 ºN	81.730375ºW		
14	27.209754 ºN	81.723290 ºW		
15	27.209773 ºN	81.714586 ºW		
16	27.209715 ºN	81.705654 ºW		
17	27.209752 ºN	81.696939 ºW		
18	27.209025 ºN	81.686302 ºW		
19	27.209571 ºN	81.677797 ºW		
20	27.200779 ºN	81.677455 ºW	6/2/2025 (PM) – 6/11/2025 (AM)	Weather conditions met criteria on survey dates June 2-10, 2025.
21	27.193876 ºN	81.677525 ºW		
22	27.187397 ºN	81.677308 ºW		
23	27.209677 ºN	81.670907 ºW	5/29/2025 (PM) – 6/11/2025 (AM)	Weather conditions met criteria on survey dates May 29-31 and June 1-10, 2025.
24	27.216017 ºN	81.667106 ºW		
25	27.209161 ºN	81.660853 ºW		
26	27.209339 ºN	81.651184 ºW		
27	27.209936 ºN	81.645375 ºW		
28	27.209360 ºN	81.635984 ºW		
29	27.209363 ºN	81.627530 ºW		
30	27.209433 ºN	81.618512 ºW	5/15/2025 (PM) – 5/26/2025 (AM)	Weather conditions met criteria on survey dates May 15-20, 22, 24-25, 2025.
31	27.209816 ºN	81.609799 ºW		
32	27.209414 ºN	81.600918 ºW		
33	27.209684 ºN	81.592899 ºW		
34	27.209500 ºN	81.583656 ºW		
35	27.209470 ºN	81.576573 ºW		
36	27.212269 ºN	81.566358 ºW		
37	27.209766 ºN	81.562357 ºW		

Data Analysis

The Wildlife Acoustics Song Meter SM4BAT Full Spectrum detector records bat echolocations as Waveform Audio (WAV) files. A single WAV file is made up of a series of pulses that are considered a single bat pass. The WAV files recorded at each survey station were analyzed using Wildlife Acoustics Kaleidoscope Pro version 5.7.0. The auto-identification parameters used by Kaleidoscope Pro were from Bats of North America (Version 5.7.0), region Florida, and the sensitivity setting was set to +1 More Accurate (Conservative). The species to be selected in the auto-identification classifier included: big brown bat (*Eptesicus fuscus*), Florida bonneted bat, eastern red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*), northern yellow bat (*Lasiurus intermedius*), Seminole bat (*Lasiurus seminolus*), southeastern myotis (*Myotis austroriparius*), northern myotis/northern long-eared bat (*Myotis septentrionalis*), evening bat (*Nycticeius humeralis*), tricolored bat, and Brazilian free-tailed bat (*Tadarida brasiliensis*).

The bat acoustic data was retrieved, saved, analyzed, and interpreted by experienced biologists who have taken one or more bat acoustic courses/workshops and who have also previously reviewed Florida bonneted bat and tricolored bat echolocations using Kaleidoscope Pro. All echolocations auto-identified by Kaleidoscope Pro as being created by the two focal species were visually reviewed and manually verified by experienced biologists.

The following parameters were considered in manual verification of Florida bonneted bat echolocations:

- Whether the characteristic frequency of echolocations fall within the documented range (10-25kHz) for the Florida bonneted bat;
- Whether there are three or more echolocations where the time between echolocations remained consistent across the sequence of echolocations;
- Whether the minimum frequency remained consistent across the sequence of echolocations;
- Whether the slope and bandwidth remained consistent from echolocation to echolocation; and
- Whether there was good signal to noise ratio as evidenced by a crisp, clean oscillogram.

If a series of echolocations only met some of these requirements, and they are within the characteristic frequency of the Florida bonneted bat, these echolocations were classified as potentially coming from a Florida bonneted bat. All WAV files with characteristic frequencies below 30 kHz not assigned an auto-identification and classified by Kaleidoscope Pro as "No ID" were manually reviewed to determine if they could contain Florida bonneted bat echolocations i.e., pulses.

The following parameters were considered in manual verification of tricolored bat echolocations:

- Whether the characteristic frequency of echolocations fall within the documented range (>35-40 kHz) for the tricolored bat;
- Whether the characteristic frequency of echolocations was consistent above or below 40 kHz; and
- Whether these echolocations exhibited a high-frequency onset followed by a flat body ("hockey stick" shape).

If a series of echolocations met all of these requirements, they were classified as coming from the tricolored bat. Some WAV files contained echolocations that were faint, making it difficult to ascertain the complete shape of the pulses. Due to the similarity of echolocations between the tricolored bat and other species within the frequency

range, these echolocations were classified as potentially coming from a tricolored bat. For any survey stations that did not indicate the presence of the tricolored bat through auto-identification, all WAV files with a minimum frequency above 35 kHz and a characteristic frequency below 50 kHz not assigned an auto-identification and classified by Kaleidoscope Pro as "No ID" were reviewed to determine if they could contain tricolored bat echolocations.

Results

According to the National Oceanic and Atmospheric Administration (NOAA) National Weather Service, the default weather station for the project would have been Punta Gorda, Charlotte County Airport; however, due to the distance from the project (22.5 miles from the western limits to 33.5 from the eastern limits), coordination occurred with the USFWS to identify a suitable alternative. Coordination with USFWS personnel took place on June 5, 2025. During the meeting it was confirmed that utilizing Arcadia Municipal Airport as an alternate weather station would be acceptable. Weather data was obtained from Weather Underground and filtered for the weather data capturing the time period from 30 minutes prior to sunset to 30 minutes after sunrise and is provided in **Appendix D**. Start and end times for the surveys for each day is included in **Table 2** below. The Arcadia Municipal Airport weather station is approximately one (1) mile south of the west end of the project limits.

A summary of the acoustic data collected at each survey station is listed in **Appendix E** and is detailed in the following sections. This summary includes the total number of nights the detectors were deployed and the nights during which the weather conditions met the requirements in the Guidelines. The results of the Florida bonneted bat analysis were packaged as required and uploaded into the NABat database concurrent with data analysis. All WAV files were matched to the metadata files for each station and no errors were reported.

TABLE 2
SURVEY START AND END TIMES

Date	Sunset	Sunrise	Survey Start	Survey End
First Deployment				
5/15/2025 – 5/16/2025	8:08:00 PM	6:38:00 AM	7:38:00 PM	7:08:00 AM
5/16/2025 – 5/17/2025	8:09:00 PM	6:37:00 AM	7:39:00 PM	7:07:00 AM
5/17/2025 – 5/18/2025	8:09:00 PM	6:37:00 AM	7:39:00 PM	7:07:00 AM
5/18/2025 – 5/19/2025	8:10:00 PM	6:37:00 AM	7:40:00 PM	7:07:00 AM
5/19/2025 – 5/20/2025	8:10:00 PM	6:36:00 AM	7:40:00 PM	7:06:00 AM
5/20/2025 – 5/21/2025	8:10:00 PM	6:35:00 AM	7:40:00 PM	7:05:00 AM
5/21/2025 – 5/22/2025	8:11:00 PM	6:35:00 AM	7:41:00 PM	7:05:00 AM
5/22/2025 - 5/23/2025	8:12:00 PM	6:35:00 AM	7:42:00 PM	7:05:00 AM
5/23/2025 – 5/24/2025	8:13:00 PM	6:35:00 AM	7:43:00 PM	7:05:00 AM
5/24/2025 – 5/25/2025	8:13:00 PM	6:34:00 AM	7:43:00 PM	7:04:00 AM
5/25/2025 – 5/26/2025	8:14:00 PM	6:34:00 AM	7:44:00 PM	7:04:00 AM
Second Deployment				
5/29/2025 – 5/30/2025	8:16:00 PM	6:33:00 AM	7:46:00 PM	7:03:00 AM
5/30/2025 – 5/31/2025	8:16:00 PM	6:33:00 AM	7:46:00 PM	7:03:00 AM
5/31/2025 – 6/1/2025	8:17:00 PM	6:32:00 AM	7:47:00 PM	7:02:00 AM

Date	Sunset	Sunrise	Survey Start	Survey End
6/1/2025 - 6/2/2025	8:17:00 PM	6:32:00 AM	7:47:00 PM	7:02:00 AM
6/2/2025 - 6/3/2025	8:18:00 PM	6:32:00 AM	7:48:00 PM	7:02:00 AM
6/3/2025 - 6/4/2025	8:18:00 PM	6:32:00 AM	7:48:00 PM	7:02:00 AM
6/4/2025 - 6/5/2025	8:19:00 PM	6:32:00 AM	7:49:00 PM	7:02:00 AM
6/5/2025 - 6/6/2025	8:19:00 PM	6:32:00 AM	7:49:00 PM	7:02:00 AM
6/6/2025 – 6/7/2025	8:20:00 PM	6:32:00 AM	7:50:00 PM	7:02:00 AM
6/7/2025 - 6/8/2025	8:20:00 PM	6:32:00 AM	7:50:00 PM	7:02:00 AM
6/8/2025 - 6/9/2025	8:21:00 PM	6:32:00 AM	7:51:00 PM	7:02:00 AM
6/9/2025 - 6/10/2025	8:21:00 PM	6:32:00 AM	7:51:00 PM	7:02:00 AM
6/10/2025 - 6/11/2025	8:21:00 PM	6:32:00 AM	7:51:00 PM	7:02:00 AM
Third Deployment				
6/16/2025 - 6/17/2025	8:23:00 PM	6:32:00 AM	7:53:00 PM	7:02:00 AM
6/17/2025 - 6/18/2025	8:23:00 PM	6:32:00 AM	7:53:00 PM	7:02:00 AM
6/18/2025 - 6/19/2025	8:23:00 PM	6:32:00 AM	7:53:00 PM	7:02:00 AM
6/19/2025 - 6/20/2025	8:23:00 PM	6:32:00 AM	7:53:00 PM	7:02:00 AM
6/20/2025 - 6/21/2025	8:24:00 PM	6:33:00 AM	7:54:00 PM	7:03:00 AM
6/21/2025 - 6/22/2025	8:24:00 PM	6:33:00 AM	7:54:00 PM	7:03:00 AM
6/22/2025 - 6/23/2025	8:24:00 PM	6:33:00 AM	7:54:00 PM	7:03:00 AM
6/23/2025 - 6/24/2025	8:24:00 PM	6:33:00 AM	7:54:00 PM	7:03:00 AM
6/24/2025 - 6/25/2025	8:24:00 PM	6:34:00 AM	7:54:00 PM	7:04:00 AM
6/25/2025 - 6/26/2025	8:25:00 PM	6:34:00 AM	7:55:00 PM	7:04:00 AM
6/26/2025 - 6/27/2025	8:25:00 PM	6:34:00 AM	7:55:00 PM	7:04:00 AM
6/27/2025 - 6/28/2025	8:25:00 PM	6:35:00 AM	7:55:00 PM	7:05:00 AM
6/28/2025 - 6/29/2025	8:25:00 PM	6:35:00 AM	7:55:00 PM	7:05:00 AM
6/29/2025 - 6/30/2025	8:25:00 PM	6:35:00 AM	7:55:00 PM	7:05:00 AM

Acoustic Survey Station 1

Station 1 was surveyed from May 30 through June 11, 2025. The nights with acceptable weather conditions were May 30-31 and June 1-10, 2025.

A total of 5,546 WAV files were recorded and, of these, 4,188 WAV files were auto-identified to the species level, 769 WAV files were not assigned an auto-identification, and 589 WAV files were classified as noise. Fifty-three (53) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of three (3) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and one (1) was confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (25 WAV files)
- Eastern red bat (3 WAV files)

- Hoary bat (450 WAV files)
- Northern yellow bat (31 WAV files)
- Seminole bat (39 WAV files)
- Southeastern myotis (3 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (6 WAV files)
- Brazilian free-tailed bat (3,575 WAV files)
- **Florida bonneted bat (53 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (3 WAV files with confirmed 1 WAV file)**

Acoustic Survey Station 2

Station 2 was surveyed from May 30 through June 11, 2025. The nights with acceptable weather conditions were May 30-31 and June 1-10, 2025.

A total of 4,425 WAV files were recorded and, of these, 3,087 WAV files were auto-identified to the species level, 889 WAV files were not assigned an auto-identification, and 449 WAV files were classified as noise. Seven (7) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of eight (8) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and seven (7) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (31 WAV files)
- Eastern red bat (7 WAV files)
- Hoary bat (248 WAV files)
- Northern yellow bat (196 WAV files)
- Seminole bat (36 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (4 WAV files)
- Brazilian free-tailed bat (2,550 WAV files)
- **Florida bonneted bat (7 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (8 WAV files with confirmed 7 WAV files)**

Acoustic Survey Station 3

Station 3 was surveyed from June 16-30, 2025. The nights with acceptable weather conditions were June 20-21, 23-29, 2025.

A total of 4,291 WAV files were recorded and, of these, 1,482 WAV files were auto-identified to the species level, 400 WAV files were not assigned an auto-identification, and 2,409 WAV files were classified as noise. Three (3) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually

inspected and none were confirmed to be Florida bonneted bat echolocations. A total of sixteen (16) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and all were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (17 WAV files)
- Eastern red bat (11 WAV files)
- Hoary bat (68 WAV files)
- Northern yellow bat (147 WAV files)
- Seminole bat (3 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (3 WAV files)
- Brazilian free-tailed bat (1,214 WAV files)
- **Florida bonneted bat (3 WAV files with confirmed 0 WAV files)**
- **Tricolored bat (16 WAV files with 16 confirmed WAV files)**

Acoustic Survey Station 4

Station 4 was surveyed from June 16-30, 2025. The nights with acceptable weather conditions were June 20-21, 23-29, 2025.

A total of 15,799 WAV files were recorded and, of these, 1,605 WAV files were auto-identified to the species level, 524 WAV files were not assigned an auto-identification, and 13,670 WAV files were classified as noise. Six (6) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of eighty-four (84) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and all were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (68 WAV files)
- Eastern red bat (54 WAV files)
- Hoary bat (36 WAV files)
- Northern yellow bat (512 WAV files)
- Seminole bat (75 WAV files)
- Southeastern myotis (1 WAV file)
- Northern long-eared bat (0 WAV files)
- Evening bat (32 WAV files)
- Brazilian free-tailed bat (737 WAV files)
- **Florida bonneted bat (6 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (84 WAV files with confirmed 84 WAV files)**

Acoustic Survey Station 5

Station 5 was surveyed from June 16-30, 2025. The nights with acceptable weather conditions were June 20-21, 23-29, 2025.

A total of 11,791 WAV files were recorded and, of these, 925 WAV files were auto-identified to the species level, 413 WAV files were not assigned an auto-identification, and 10,453 WAV files were classified as noise. No WAV files were auto-identified as containing Florida bonneted bat echolocations. A total of 135 WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and all were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (11 WAV files)
- Eastern red bat (68 WAV files)
- Hoary bat (13 WAV files)
- Northern yellow bat (291 WAV files)
- Seminole bat (66 WAV files)
- Southeastern myotis (3 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (54 WAV files)
- Brazilian free-tailed bat (284 WAV files)
- **Florida bonneted bat (0 WAV files)**
- **Tricolored bat (135 WAV files with confirmed 135 WAV files)**

Acoustic Survey Station 6

Station 6 was surveyed from June 16-30, 2025. The nights with acceptable weather conditions were June 20-21, 23-29, 2025.

A total of 5,535 WAV files were recorded and, of these, 2,183 WAV files were auto-identified to the species level, 716 WAV files were not assigned an auto-identification, and 2,636 WAV files were classified as noise. Two (2) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of ten (10) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and nine (9) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (58 WAV files)
- Eastern red bat (5 WAV files)
- Hoary bat (123 WAV files)
- Northern yellow bat (338 WAV files)
- Seminole bat (29 WAV files)

- Southeastern myotis (2 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (76 WAV files)
- Brazilian free-tailed bat (1,539 WAV files)
- **Florida bonneted bat (2 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (10 WAV files with confirmed 9 WAV files)**

Acoustic Survey Station 7

Station 7 was surveyed from May 30 through June 11, 2025. The nights with acceptable weather conditions were May 30-31 and June 1-10, 2025.

A total of 10,017 WAV files were recorded and, of these, 3,757 WAV files were auto-identified to the species level, 2,056 WAV files were not assigned an auto-identification, and 4,204 WAV files were classified as noise. Six (6) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and one (1) was confirmed to be Florida bonneted bat echolocations. A total of twenty-nine (29) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and all were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (59 WAV files)
- Eastern red bat (317 WAV files)
- Hoary bat (246 WAV files)
- Northern yellow bat (1,070 WAV files)
- Seminole bat (133 WAV files)
- Southeastern myotis (5 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (90 WAV files)
- Brazilian free-tailed bat (1,802 WAV files)
- **Florida bonneted bat (6 WAV files with 1 confirmed WAV files)**
- **Tricolored bat (29 WAV files with confirmed 29 WAV files)**

Acoustic Survey Station 8

Station 8 was surveyed from May 30 through June 11, 2025. The nights with acceptable weather conditions were May 30-31 and June 1-10, 2025.

A total of 18,306 WAV files were recorded and, of these, 3,981 WAV files were auto-identified to the species level, 1,672 WAV files were not assigned an auto-identification, and 12,653 WAV files were classified as noise. One (1) WAV file was auto-identified as containing Florida bonneted bat echolocations. This WAV file was manually inspected and was not confirmed to be a Florida bonneted bat echolocation. A total of 140 WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and 138 were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (127 WAV files)
- Eastern red bat (114 WAV files)
- Hoary bat (337 WAV files)
- Northern yellow bat (384 WAV files)
- Seminole bat (741 WAV files)
- Southeastern myotis (37 WAV files)
- Northern long-eared bat (1 WAV file)
- Evening bat (236 WAV files)
- Brazilian free-tailed bat (1,863 WAV files)
- **Florida bonneted bat (1 WAV file with 0 confirmed WAV files)**
- **Tricolored bat (140 WAV files with confirmed 138 WAV files)**

Acoustic Survey Station 9

Station 9 was surveyed from May 30 through June 11, 2025. The nights with acceptable weather conditions were May 30-31 and June 1-10, 2025.

A total of 8,060 WAV files were recorded and, of these, 3,257 WAV files were auto-identified to the species level, 948 WAV files were not assigned an auto-identification, and 3,855 WAV files were classified as noise. Three (3) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of 255 WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and 147 were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (63 WAV files)
- Eastern red bat (34 WAV files)
- Hoary bat (216 WAV files)
- Northern yellow bat (287 WAV files)
- Seminole bat (304 WAV files)
- Southeastern myotis (6 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (91 WAV files)
- Brazilian free-tailed bat (1,998 WAV files)
- **Florida bonneted bat (3 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (255 WAV files with confirmed 147 WAV files)**

Acoustic Survey Station 10

Station 10 was surveyed from May 30 through June 11, 2025. The nights with acceptable weather conditions were May 30-31 and June 1-10, 2025.

A total of 7,191 WAV files were recorded and, of these, 2,693 WAV files were auto-identified to the species level, 981 WAV files were not assigned an auto-identification, and 3,517 WAV files were classified as noise. One (1) WAV file was auto-identified as containing Florida bonneted bat echolocations. This WAV file was manually inspected and was not confirmed to be a Florida bonneted bat echolocation. A total of seventy-four (74) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and forty-one (41) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (52 WAV files)
- Eastern red bat (37 WAV files)
- Hoary bat (143 WAV files)
- Northern yellow bat (333 WAV files)
- Seminole bat (433 WAV files)
- Southeastern myotis (6 WAV files)
- Northern long-eared bat (1 WAV file)
- Evening bat (174 WAV files)
- Brazilian free-tailed bat (1,439 WAV files)
- **Florida bonneted bat (1 WAV file with 0 confirmed WAV files)**
- **Tricolored bat (74 WAV files with confirmed 41 WAV files)**

Acoustic Survey Station 11

Station 11 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 5,225 WAV files were recorded and, of these, 2,700 WAV files were auto-identified to the species level, 842 WAV files were not assigned an auto-identification, and 1,683 WAV files were classified as noise. One (1) WAV file was auto-identified as containing Florida bonneted bat echolocations. This WAV file was manually inspected and was not confirmed to be a Florida bonneted bat echolocation. A total of thirty-eight (38) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and thirty (30) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (66 WAV files)
- Eastern red bat (9 WAV files)
- Hoary bat (235 WAV files)
- Northern yellow bat (189 WAV files)
- Seminole bat (227 WAV files)
- Southeastern myotis (3 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (51 WAV files)

- Brazilian free-tailed bat (1,881 WAV files)
- **Florida bonneted bat (1 WAV file with 0 confirmed WAV files)**
- **Tricolored bat (38 WAV files with confirmed 30 WAV files)**

Acoustic Survey Station 12

Station 12 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 20,549 WAV files were recorded and, of these, 1,414 WAV files were auto-identified to the species level, 696 WAV files were not assigned an auto-identification, and 18,439 WAV files were classified as noise. One (1) WAV file was auto-identified as containing Florida bonneted bat echolocations. This WAV file was manually inspected and was not confirmed to be a Florida bonneted bat echolocation. A total of forty-two (42) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and twenty-four (24) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (72 WAV files)
- Eastern red bat (46 WAV files)
- Hoary bat (78 WAV files)
- Northern yellow bat (220 WAV files)
- Seminole bat (28 WAV files)
- Southeastern myotis (9 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (152 WAV files)
- Brazilian free-tailed bat (766 WAV files)
- **Florida bonneted bat (1 WAV file with 0 confirmed WAV files)**
- **Tricolored bat (42 WAV files with confirmed 24 WAV files)**

Acoustic Survey Station 13

Station 13 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 6,092 WAV files were recorded and, of these, 3,235 WAV files were auto-identified to the species level, 1,058 WAV files were not assigned an auto-identification, and 1,799 WAV files were classified as noise. Twenty-two (22) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of 113 WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and seventy-six (76) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (107 WAV files)

- Eastern red bat (23 WAV files)
- Hoary bat (190 WAV files)
- Northern yellow bat (420 WAV files)
- Seminole bat (135 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (120 WAV files)
- Brazilian free-tailed bat (2,105 WAV files)
- **Florida bonneted bat (22 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (113 WAV files with confirmed 76 WAV files)**

Acoustic Survey Station 14

Station 14 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 8,095 WAV files were recorded and, of these, 662 WAV files were auto-identified to the species level, 352 WAV files were not assigned an auto-identification, and 7,081 WAV files were classified as noise. Eleven (11) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of forty-two (42) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and twenty-six (26) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (18 WAV files)
- Eastern red bat (3 WAV files)
- Hoary bat (33 WAV files)
- Northern yellow bat (112 WAV files)
- Seminole bat (7 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (1 WAV file)
- Evening bat (4 WAV files)
- Brazilian free-tailed bat (431 WAV files)
- **Florida bonneted bat (11 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (42 WAV files with confirmed 26 WAV files)**

Acoustic Survey Station 15

Station 15 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 8,574 WAV files were recorded and, of these, 688 WAV files were auto-identified to the species level, 376 WAV files were not assigned an auto-identification, and 7,510 WAV files were classified as noise. No WAV files were auto-identified as containing Florida bonneted bat echolocations. A total of fifty-three (53) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and thirty-five (35) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (21 WAV files)
- Eastern red bat (14 WAV files)
- Hoary bat (35 WAV files)
- Northern yellow bat (162 WAV files)
- Seminole bat (3 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (5 WAV files)
- Brazilian free-tailed bat (395 WAV files)
- **Florida bonneted bat (0 WAV files)**
- **Tricolored bat (53 WAV files with confirmed 35 WAV files)**

Acoustic Survey Station 16

Station 16 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 23,970 WAV files were recorded and, of these, 4,237 WAV files were auto-identified to the species level, 1,812 WAV files were not assigned an auto-identification, and 17,921 WAV files were classified as noise. Eight (8) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of 107 WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and 105 were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (171 WAV files)
- Eastern red bat (50 WAV files)
- Hoary bat (99 WAV files)
- Northern yellow bat (1,376 WAV files)
- Seminole bat (50 WAV files)
- Southeastern myotis (1 WAV file)
- Northern long-eared bat (1 WAV file)
- Evening bat (45 WAV files)
- Brazilian free-tailed bat (2,330 WAV files)
- **Florida bonneted bat (8 WAV files with 0 confirmed WAV files)**

- **Tricolored bat (107 WAV files with confirmed 105 WAV files)**

Acoustic Survey Station 17

Station 17 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 16,436 WAV files were recorded and, of these, 4,475 WAV files were auto-identified to the species level, 1,381 WAV files were not assigned an auto-identification, and 10,580 WAV files were classified as noise. Seven (7) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and one (1) was confirmed to be a Florida bonneted bat echolocation. A total of Thirty-one (31) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and all were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (114 WAV files)
- Eastern red bat (14 WAV files)
- Hoary bat (165 WAV files)
- Northern yellow bat (865 WAV files)
- Seminole bat (24 WAV files)
- Southeastern myotis (1 WAV file)
- Northern long-eared bat (0 WAV files)
- Evening bat (22 WAV files)
- Brazilian free-tailed bat (3,232 WAV files)
- **Florida bonneted bat (7 WAV files with 1 confirmed WAV file)**
- **Tricolored bat (31 WAV files with confirmed 31 WAV files)**

Acoustic Survey Station 18

Station 18 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 5,321 WAV files were recorded and, of these, 480 WAV files were auto-identified to the species level, 217 WAV files were not assigned an auto-identification, and 4,624 WAV files were classified as noise. One (1) WAV file was auto-identified as containing Florida bonneted bat echolocations. This WAV file was manually inspected and was not confirmed to be a Florida bonneted bat echolocation. A total of seventy-four (74) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and forty-one (41) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (20 WAV files)
- Eastern red bat (9 WAV files)

- Hoary bat (33 WAV files)
- Northern yellow bat (64 WAV files)
- Seminole bat (0 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (11 WAV files)
- Brazilian free-tailed bat (268 WAV files)
- **Florida bonneted bat (1 WAV file with 0 confirmed WAV files)**
- **Tricolored bat (74 WAV files with confirmed 41 WAV files)**

Acoustic Survey Station 19

Station 19 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 10,076 WAV files were recorded and, of these, 4,885 WAV files were auto-identified to the species level, 1,542 WAV files were not assigned an auto-identification, and 3,649 WAV files were classified as noise. Six (6) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of forty-nine (49) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and eighteen (18) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (50 WAV files)
- Eastern red bat (5 WAV files)
- Hoary bat (181 WAV files)
- Northern yellow bat (551 WAV files)
- Seminole bat (13 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (6 WAV files)
- Brazilian free-tailed bat (4,024 WAV files)
- **Florida bonneted bat (6 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (49 WAV files with confirmed 18 WAV files)**

Acoustic Survey Station 20

Station 20 was surveyed from June 2-11, 2025. The nights with acceptable weather conditions were June 2-10, 2025.

A total of 20,134 WAV files were recorded and, of these, 141 WAV files were auto-identified to the species level, 83 WAV files were not assigned an auto-identification, and 19,910 WAV files were classified as noise. No WAV files were auto-identified as containing Florida bonneted bat echolocations. A total of six (6) WAV files were auto-

identified as containing tricolored bat echolocations. These WAV files were manually inspected and all were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (4 WAV files)
- Eastern red bat (4 WAV files)
- Hoary bat (0 WAV files)
- Northern yellow bat (80 WAV files)
- Seminole bat (0 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV file)
- Evening bat (1 WAV files)
- Brazilian free-tailed bat (46 WAV files)
- **Florida bonneted bat (0 WAV files)**
- **Tricolored bat (6 WAV files with confirmed 6 WAV files)**

Acoustic Survey Station 21

Station 21 was surveyed from June 2-11, 2025. The nights with acceptable weather conditions were June 2-10, 2025.

A total of 7,470 WAV files were recorded and, of these, 1,704 WAV files were auto-identified to the species level, 557 WAV files were not assigned an auto-identification, and 5,209 WAV files were classified as noise. Three (3) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of 176 WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and 157 were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (123 WAV files)
- Eastern red bat (8 WAV files)
- Hoary bat (38 WAV files)
- Northern yellow bat (503 WAV files)
- Seminole bat (39 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (8 WAV files)
- Brazilian free-tailed bat (806 WAV files)
- **Florida bonneted bat (3 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (176 WAV files with confirmed 157 WAV files)**

Acoustic Survey Station 22

Station 22 was surveyed from June 2-11, 2025. The nights with acceptable weather conditions were June 2-10, 2025.

A total of 12,779 WAV files were recorded and, of these, 1,421 WAV files were auto-identified to the species level, 507 WAV files were not assigned an auto-identification, and 10,851 WAV files were classified as noise. Twenty-two (22) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of 431 WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and 421 were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (71 WAV files)
- Eastern red bat (72 WAV files)
- Hoary bat (26 WAV files)
- Northern yellow bat (224 WAV files)
- Seminole bat (9 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (13 WAV files)
- Brazilian free-tailed bat (553 WAV files)
- **Florida bonneted bat (22 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (431 WAV files with confirmed 421 WAV files)**

Acoustic Survey Station 23

Station 23 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 14,007 WAV files were recorded and, of these, 6,704 WAV files were auto-identified to the species level, 2,116 WAV files were not assigned an auto-identification, and 5,187 WAV files were classified as noise. One (1) WAV file was auto-identified as containing Florida bonneted bat echolocations. This WAV file was manually inspected and was not confirmed to be a Florida bonneted bat echolocation. A total of eighteen (18) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and 18 were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (115 WAV files)
- Eastern red bat (16 WAV files)
- Hoary bat (269 WAV files)
- Northern yellow bat (1,220 WAV files)
- Seminole bat (106 WAV files)

- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (2 WAV files)
- Brazilian free-tailed bat (4,957 WAV files)
- **Florida bonneted bat (1 WAV file with 0 confirmed WAV files)**
- **Tricolored bat (18 WAV files with confirmed 18 WAV files)**

Acoustic Survey Station 24

Station 24 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 31-31 and June 1-10, 2025.

A total of 11,743 WAV files were recorded and, of these, 4,399 WAV files were auto-identified to the species level, 2,108 WAV files were not assigned an auto-identification, and 5,236 WAV files were classified as noise. One (1) WAV file was auto-identified as containing Florida bonneted bat echolocations. This WAV file was manually inspected and was not confirmed to be a Florida bonneted bat echolocation. A total of thirty (30) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and twenty-five (25) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (307 WAV files)
- Eastern red bat (339 WAV files)
- Hoary bat (93 WAV files)
- Northern yellow bat (1,627 WAV files)
- Seminole bat (282 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (128 WAV files)
- Brazilian free-tailed bat (1,592 WAV files)
- **Florida bonneted bat (1 WAV file with 0 confirmed WAV files)**
- **Tricolored bat (30 WAV files with confirmed 25 WAV files)**

Acoustic Survey Station 25

Station 25 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 31-31 and June 1-10, 2025.

A total of 3,353 WAV files were recorded and, of these, 1,819 WAV files were auto-identified to the species level, 636 WAV files were not assigned an auto-identification, and 898 WAV files were classified as noise. Fourteen (14) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. No WAV files were auto-identified as containing tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (57 WAV files)
- Eastern red bat (1 WAV file)
- Hoary bat (82 WAV files)
- Northern yellow bat (326 WAV files)
- Seminole bat (16 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (0 WAV files)
- Brazilian free-tailed bat (1,323 WAV files)
- **Florida bonneted bat (14 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (0 WAV files)**

Acoustic Survey Station 26

Station 26 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 31-31 and June 1-10, 2025.

A total of 6,167 WAV files were recorded and, of these, 843 WAV files were auto-identified to the species level, 377 WAV files were not assigned an auto-identification, and 4,947 WAV files were classified as noise. One (1) WAV file was auto-identified as containing Florida bonneted bat echolocations. This WAV file was manually inspected and was not confirmed to be a Florida bonneted bat echolocation. A total of five (5) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and five (5) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (18 WAV files)
- Eastern red bat (0 WAV files)
- Hoary bat (59 WAV files)
- Northern yellow bat (94 WAV files)
- Seminole bat (0 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (0 WAV files)
- Brazilian free-tailed bat (666 WAV files)
- **Florida bonneted bat (1 WAV file with 0 confirmed WAV files)**
- **Tricolored bat (5 WAV files with confirmed 5 WAV files)**

Acoustic Survey Station 27

Station 27 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 31-31 and June 1-10, 2025.

A total of 13,753 WAV files were recorded and, of these, 1,877 WAV files were auto-identified to the species level, 724 WAV files were not assigned an auto-identification, and 11,152 WAV files were classified as noise. One (1) WAV file was auto-identified as containing Florida bonneted bat echolocations. This WAV file was manually inspected and was not confirmed to be a Florida bonneted bat echolocation. A total of forty-six (46) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and forty-two (42) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (38 WAV files)
- Eastern red bat (8 WAV files)
- Hoary bat (46 WAV files)
- Northern yellow bat (450 WAV files)
- Seminole bat (16 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (9 WAV files)
- Brazilian free-tailed bat (1,263 WAV files)
- **Florida bonneted bat (1 WAV file with 0 confirmed WAV files)**
- **Tricolored bat (46 WAV files with confirmed 42 WAV files)**

Acoustic Survey Station 28

Station 28 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 31-31 and June 1-10, 2025.

A total of 2,625 WAV files were recorded and, of these, 1,179 WAV files were auto-identified to the species level, 398 WAV files were not assigned an auto-identification, and 1,048 WAV files were classified as noise. Thirteen (13) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of fifty-five (55) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and forty-eight (48) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (13 WAV files)
- Eastern red bat (2 WAV files)
- Hoary bat (26 WAV files)
- Northern yellow bat (132 WAV files)
- Seminole bat (1 WAV file)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (1 WAV file)
- Evening bat (5 WAV files)

- Brazilian free-tailed bat (931 WAV files)
- **Florida bonneted bat (13 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (55 WAV files with confirmed 48 WAV files)**

Acoustic Survey Station 29

Station 29 was surveyed from May 29 through June 11, 2025. The nights with acceptable weather conditions were May 29-31 and June 1-10, 2025.

A total of 4,586 WAV files were recorded and, of these, 2,597 WAV files were auto-identified to the species level, 761 WAV files were not assigned an auto-identification, and 1,228 WAV files were classified as noise. Two (2) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of thirty-five (35) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and all were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (38 WAV files)
- Eastern red bat (5 WAV files)
- Hoary bat (51 WAV files)
- Northern yellow bat (408 WAV files)
- Seminole bat (3 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (4 WAV files)
- Brazilian free-tailed bat (2,051 WAV files)
- **Florida bonneted bat (2 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (35 WAV files with confirmed 35 WAV files)**

Acoustic Survey Station 30

Station 30 was surveyed from May 15-26, 2025. The nights with acceptable weather conditions were May 15-20, 22, 24-25, 2025.

A total of 7,063 WAV files were recorded and, of these, 3,572 WAV files were auto-identified to the species level, 1,316 WAV files were not assigned an auto-identification, and 2,175 WAV files were classified as noise. Six (6) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of three (3) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and all were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (499 WAV files)

- Eastern red bat (0 WAV files)
- Hoary bat (224 WAV files)
- Northern yellow bat (947 WAV files)
- Seminole bat (7 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (6 WAV files)
- Brazilian free-tailed bat (1,880 WAV files)
- **Florida bonneted bat (6 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (3 WAV files with confirmed 3 WAV files)**

Acoustic Survey Station 31

Station 31 was surveyed from May 15-26, 2025. The nights with acceptable weather conditions were May 15-20, 22, 24-25, 2025.

A total of 17,824 WAV files were recorded and, of these, 2,232 WAV files were auto-identified to the species level, 1,422 WAV files were not assigned an auto-identification, and 14,170 WAV files were classified as noise. A total of 127 WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of eight (8) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and three (3) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (84 WAV files)
- Eastern red bat (0 WAV files)
- Hoary bat (108 WAV files)
- Northern yellow bat (618 WAV files)
- Seminole bat (8 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (3 WAV files)
- Brazilian free-tailed bat (1,276 WAV files)
- **Florida bonneted bat (127 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (8 WAV files with confirmed 3 WAV files)**

Acoustic Survey Station 32

Station 32 was surveyed from May 15-26, 2025. The nights with acceptable weather conditions were May 15-20, 22, 24-25, 2025.

A total of 3,687 WAV files were recorded and, of these, 1,931 WAV files were auto-identified to the species level, 692 WAV files were not assigned an auto-identification, and 1,064 WAV files were classified as noise. Two (2) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of nine (9) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and all were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (171 WAV files)
- Eastern red bat (2 WAV files)
- Hoary bat (123 WAV files)
- Northern yellow bat (605 WAV files)
- Seminole bat (9 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (45 WAV files)
- Brazilian free-tailed bat (965 WAV files)
- **Florida bonneted bat (2 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (9 WAV files with confirmed 9 WAV files)**

Acoustic Survey Station 33

Station 33 was surveyed from May 15-26, 2025. The nights with acceptable weather conditions were May 15-20, 22, 24-25, 2025.

A total of 4,756 WAV files were recorded and, of these, 1,996 WAV files were auto-identified to the species level, 950 WAV files were not assigned an auto-identification, and 1,810 WAV files were classified as noise. Three (3) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of three (3) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and two (2) were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (202 WAV files)
- Eastern red bat (2 WAV files)
- Hoary bat (57 WAV files)
- Northern yellow bat (325 WAV files)
- Seminole bat (3 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (11 WAV files)
- Brazilian free-tailed bat (1,390 WAV files)

- **Florida bonneted bat (3 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (3 WAV files with confirmed 2 WAV files)**

Acoustic Survey Station 34

Station 34 was surveyed from May 15-26, 2025. The nights with acceptable weather conditions were May 15-20, 22, 24-25, 2025.

A total of 6,178 WAV files were recorded and, of these, 1,851 WAV files were auto-identified to the species level, 716 WAV files were not assigned an auto-identification, and 3,611 WAV files were classified as noise. Three (3) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. No WAV files were auto-identified as containing tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (98 WAV files)
- Eastern red bat (2 WAV files)
- Hoary bat (143 WAV files)
- Northern yellow bat (502 WAV files)
- Seminole bat (3 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (4 WAV files)
- Brazilian free-tailed bat (1,096 WAV files)
- **Florida bonneted bat (3 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (0 WAV files)**

Acoustic Survey Station 35

Station 35 was surveyed from May 15-26, 2025. The nights with acceptable weather conditions were May 15-20, 22, 24-25, 2025.

A total of 2,716 WAV files were recorded and, of these, 1,207 WAV files were auto-identified to the species level, 583 WAV files were not assigned an auto-identification, and 926 WAV files were classified as noise. Two (2) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. No WAV files were auto-identified as containing tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (151 WAV files)
- Eastern red bat (7 WAV files)
- Hoary bat (85 WAV files)

- Northern yellow bat (351 WAV files)
- Seminole bat (5 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (2 WAV files)
- Brazilian free-tailed bat (604 WAV files)
- **Florida bonneted bat (2 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (0 WAV files)**

Acoustic Survey Station 36

Station 36 was surveyed from May 15-26, 2025. The nights with acceptable weather conditions were May 15-20, 22, 24-25, 2025.

A total of 4,695 WAV files were recorded and, of these, 1,071 WAV files were auto-identified to the species level, 842 WAV files were not assigned an auto-identification, and 2,782 WAV files were classified as noise. Fifty-three (53) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of three (3) WAV files were auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and one (1) was confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (77 WAV files)
- Eastern red bat (20 WAV files)
- Hoary bat (62 WAV files)
- Northern yellow bat (218 WAV files)
- Seminole bat (8 WAV files)
- Southeastern myotis (0 WAV files)
- Northern long-eared bat (1 WAV files)
- Evening bat (32 WAV files)
- Brazilian free-tailed bat (597 WAV files)
- **Florida bonneted bat (53 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (3 WAV files with confirmed 1 WAV file)**

Acoustic Survey Station 37

Station 37 was surveyed from May 15-26, 2025. The nights with acceptable weather conditions were May 15-20, 22, 24-25, 2025.

A total of 15,180 WAV files were recorded and, of these, 2,293 WAV files were auto-identified to the species level, 911 WAV files were not assigned an auto-identification, and 11,976 WAV files were classified as noise. Three (3) WAV files were auto-identified as containing Florida bonneted bat echolocations. These WAV files were manually inspected and none were confirmed to be Florida bonneted bat echolocations. A total of two (2) WAV files were

auto-identified as containing tricolored bat echolocations. These WAV files were manually inspected and none were confirmed to be at least potentially tricolored bat echolocations.

The following is a summary of the auto-identification data:

- Big brown bat (248 WAV files)
- Eastern red bat (2 WAV files)
- Hoary bat (119 WAV files)
- Northern yellow bat (647 WAV files)
- Seminole bat (6 WAV files)
- Southeastern myotis (2 WAV files)
- Northern long-eared bat (0 WAV files)
- Evening bat (17 WAV files)
- Brazilian free-tailed bat (1,247 WAV files)
- **Florida bonneted bat (3 WAV files with 0 confirmed WAV files)**
- **Tricolored bat (2 WAV files with confirmed 0 WAV files)**

Conclusions

A total of 354,015 WAV files were recorded at the 37 survey stations during Florida bonneted bat and tricolored bat acoustic surveys for the proposed SR 70 PD&E Study from west of SR 31 to SE Highlands County Line Road. Of those, 396 WAV files were auto-identified by Kaleidoscope Pro as containing Florida bonneted bat echolocations and 2,133 containing tricolored bat echolocations.

Biologists manually verified each of the 396 auto-identified Florida bonneted bat WAV files and all files with frequencies between 8 kHz and 25 kHz classified by Kaleidoscope Pro as "No ID." As a result, it was found that two (2) of the files contained echolocations from the Florida bonneted bat. The misidentified Florida bonneted bat files were mainly identified as noise (potentially from vehicular traffic, insects, or birds). Tabular results of the acoustic survey with station locations are presented in **Figure 3**. **Appendix F** includes a table with the positive Florida bonneted bat WAV files, examples of calls that were positively identified as Florida bonneted bat WAV files, and examples of the calls that were misclassified as Florida bonneted bat echolocations. Of the two (2) files that were found to contain echolocations from the Florida bonneted bat, these included search phase calls and were not recorded within 1.5 hours after sunset or before 1.5 hours before sunrise. Therefore, the USFWS 2019 Florida Bonneted Bat Consultation Guidelines roosting is not likely.

Per guidance from the FDOT's OEM, the Florida Bonneted Bat Consultation Key, included in the USFWS 2019 Florida Bonneted Bat Consultation Guidelines, was used to evaluate potential effects to the species from the SR 70 PD&E Study. In order to utilize the key, the potential impact to Florida bonneted bat roosting and foraging habitat needed to be evaluated for the project. Based on the proposed roadway improvements to the SR 70 corridor, it is anticipated that greater than 50 acres of roosting and foraging habitat is proposed to be impacted; however, exact impact acreage will be verified upon selection of the Preferred Alternative, which will include stormwater management facilities and floodplain compensation sites. As a result, the progression through the key was 1a → 2a → 3b → 6a → 7b → 10b → 12a, resulting in an effect determination of <u>May Affect, and is Likely to Adversely Affect</u> $(LAA)^{+}$ for the Florida bonneted bat and further consultation with the USFWS is required as shown in

Appendix G. As a result, coordination with the USFWS is needed to further evaluate the potential impacts of the project to the Florida bonneted bat, as well as the appropriate BMPs, compensatory mitigation, and/or compensation activities (e.g., contributions to the USFWS Florida bonneted bat conservation fund).

Biologists manually verified each of the 2,133 auto-identified tricolored bat WAV files and it was found that 1,768 files contain echolocations from the tricolored bat. If a station were to have had zero auto-identified tricolored bat WAV files, all files classified by Kaleidoscope Pro as "No ID" that had a minimum frequency above 35 kHz and a characteristic frequency less than 50 kHz would have been manually reviewed to verify an absence of tricolored bat calls. Tabular results of the acoustic survey with station locations are presented in **Figure 3**. **Appendix F** includes a table with the positive tricolored bat WAV files, examples of calls that were positively identified as tricolored bat WAV files, and examples of the calls that were misclassified as tricolored bat echolocations.

Currently, there is no Consultation Key for the tricolored bat, which would provide guidance to determine if roosting activity is likely for the species. However, based on the results of the acoustic survey data analysis, it was confirmed that tricolored bats are present within the project area. Therefore, an effect determination of May Affect Not Likely to Adversely Affect is appropriate for the species. If the tricolored bat is listed by USFWS as Threatened or Endangered and the project may affect the species, FDOT commits to reinitiating consultation with the USFWS and will provide, where applicable, the necessary Best Management Practices (BMPs), compensatory mitigation, and/or compensation activities (e.g., contributions to the USFWS Florida bonneted bat conservation fund).

As the timeline for construction is better defined, FDOT will adhere to the applicable commitments below:

1) Upon listing of the tricolored bat, if the project contains suitable habitat and requires tree trimming and/or clearing, FDOT will not conduct tree trimming/clearing activities during the tricolored bat pup season (May 1st to July 15th) and when bats may be in torpor (when temperatures are below 45 degrees Fahrenheit).

2) Upon listing of the tricolored bat, if the project contains suitable habitat and FDOT needs to trim or clear trees or perform work on bridges/culverts during the maternity season and/or when the temperature is below 45 degrees Fahrenheit, then FDOT will survey the project area for evidence of the tricolored bat. The Indiana Bat and Northern Long-eared Bat Survey Guidance (USFWS), Appendix J acoustic survey protocol in the year-round range (mist netting is not being conducted in Florida at this time), will be used for areas with tree trimming/clearing. For bridges and culverts, the Indiana Bat and Northern Long-eared Bat Survey Guidance, Appendix K, Assessing Bridges and Culverts for Bats, will be used.

a. If the surveys result in no tricolored bats detected, then FDOT can proceed with the project activities. Negative results from bridge/culvert surveys are valid for 2 years. Negative results for acoustic surveys are valid for 5 years. However, negative results for either survey may be invalidated if additional tricolored bat survey data is submitted to FWS showing presence of the species within the vicinity of the project area. Additional survey work by FDOT, or application of the avoidance and minimization measures noted in #4, may be required if updated detections are reported, and may result in reinitiation of consultation with FWS.

b. If the surveys result in positive detections of the tricolored bat, FDOT will implement conservation measures such as: not conducting tree trimming/clearing activities during the tricolored bat pup season (May 1st to July 15th) when pups are not volant and not able to escape disturbance; similarly avoid tree trimming/clearing activities when the temperatures are below 45 degrees Fahrenheit when bats may be in torpor and unresponsive to disturbance.

References

Bailey, A.M., H.K. Ober, A.R. Sovie, and R.A. McCleery. 2017. Impact of Land Use and Climate on the Distribution of the Endangered Florida Bonneted Bat. Journal of Mammalogy 98(6): 1586-1593.

Federal Register. 2013. Department of the Interior, U.S. Fish and Wildlife Service, 50 CFR Part 17, Endangered and Threatened Wildlife and Plants; Endangered Species Status for the Florida Bonneted Bat; Final Rule. Volume 78, Number 191. Pages 61004-61043.

Federal Register. 2022. Department of the Interior, U.S. Fish and Wildlife Service, 50 CFR Part 17, Endangered and Threatened Wildlife and Plants; Endangered Species Status for Tricolored Bat; Proposed Rule. Volume 87, Number 177. Pages 56381- 56393.

Federal Register. 2024. Department of the Interior, U.S. Fish and Wildlife Service, 50 CFR Part 17, Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Endangered Florida Bonneted Bat; Final Rule. Volume 89, Number 46. Pages 16624-16681.

Florida Fish and Wildlife Conservation Commission. 2016. Wildlife Occurrence System Database, Species Locations in Florida 1988-2015.

Florida Geographic Data Library. 2018. FGDL Metadata Explorer: Search and Download Data.

Marks, C.S. and G.E. Marks. 2006. Bats of Florida. The University Press of Florida. 176 Pages.

Schnitzler, H-R and E.K.V. Kalko. 2001. Echolocation by Insect Eating Bats. BioScience 51(7): 557-569.

South Florida Water Management District. SFWMD Land Cover Land Use 2017-2019.

U.S. Fish and Wildlife Service. 2019. Florida Bonneted Bat Consultation Guidelines.

U.S. Fish and Wildlife Service. 2019. USFWS IPAC Threatened and Endangered Species in Florida – 2021.

U.S. Fish and Wildlife Service. 2021. Species Status Assessment Report for the tricolored bat (*Perimyotis subflavus*) Version 1.1 December 2021. Hadley, MA.

U.S. Fish and Wildlife Service. 2023. National Wetlands Inventory spatial data.

U.S. Fish and Wildlife Service. 2024. Florida Bonneted Bat Consultation Guidelines.

U.S. Fish and Wildlife Service. 2024a. The Indiana Bat and Northern Long-eared Bat Survey Guidance. <https://www.fws.gov/sites/default/files/documents/2025-05/2024_usfws_rangewide_ibat-nleb_survey_guidelines.pdf>.

U.S. Fish and Wildlife Service. 2024b. Northern Long-eared Bat and Tricolored Bat Voluntary Environmental Review Process of Development Projects Version 1.0 April 2024.

Figures

Figure 1 Project Location

Figure 2 Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

Figure 3 Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

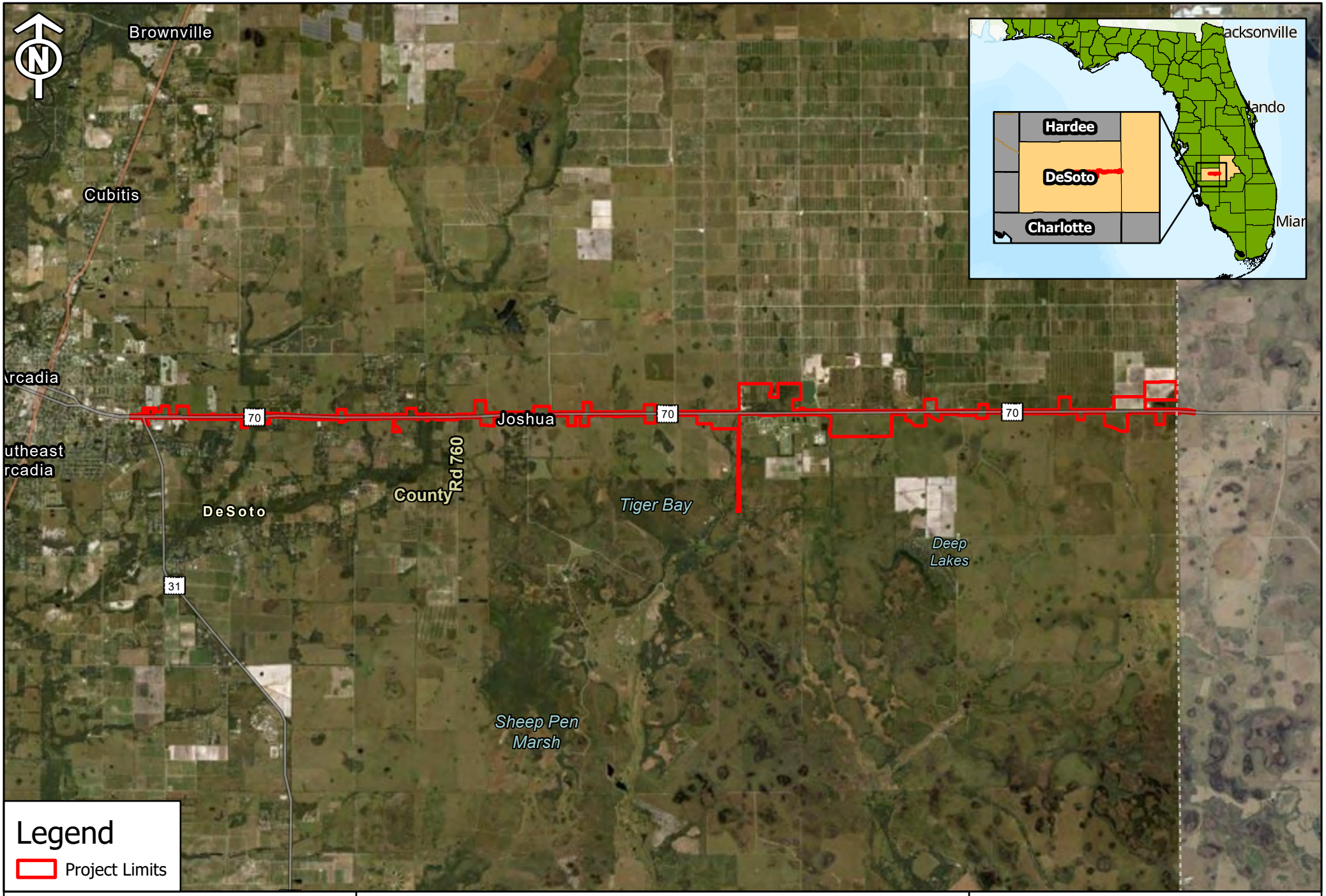


Figure 1 - Project Location

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 1 2 3 4 Miles

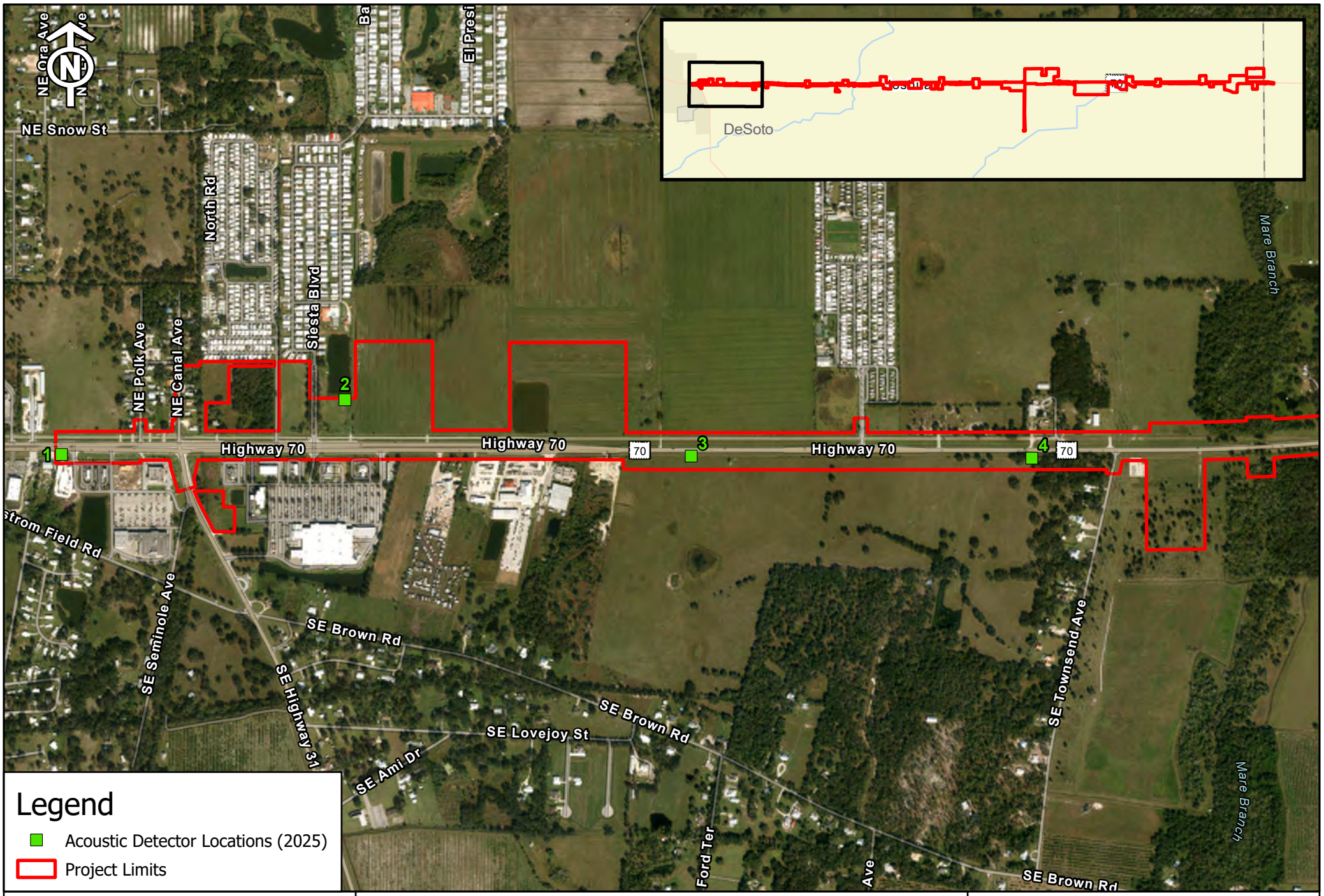


Figure 2-1 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.35 Miles

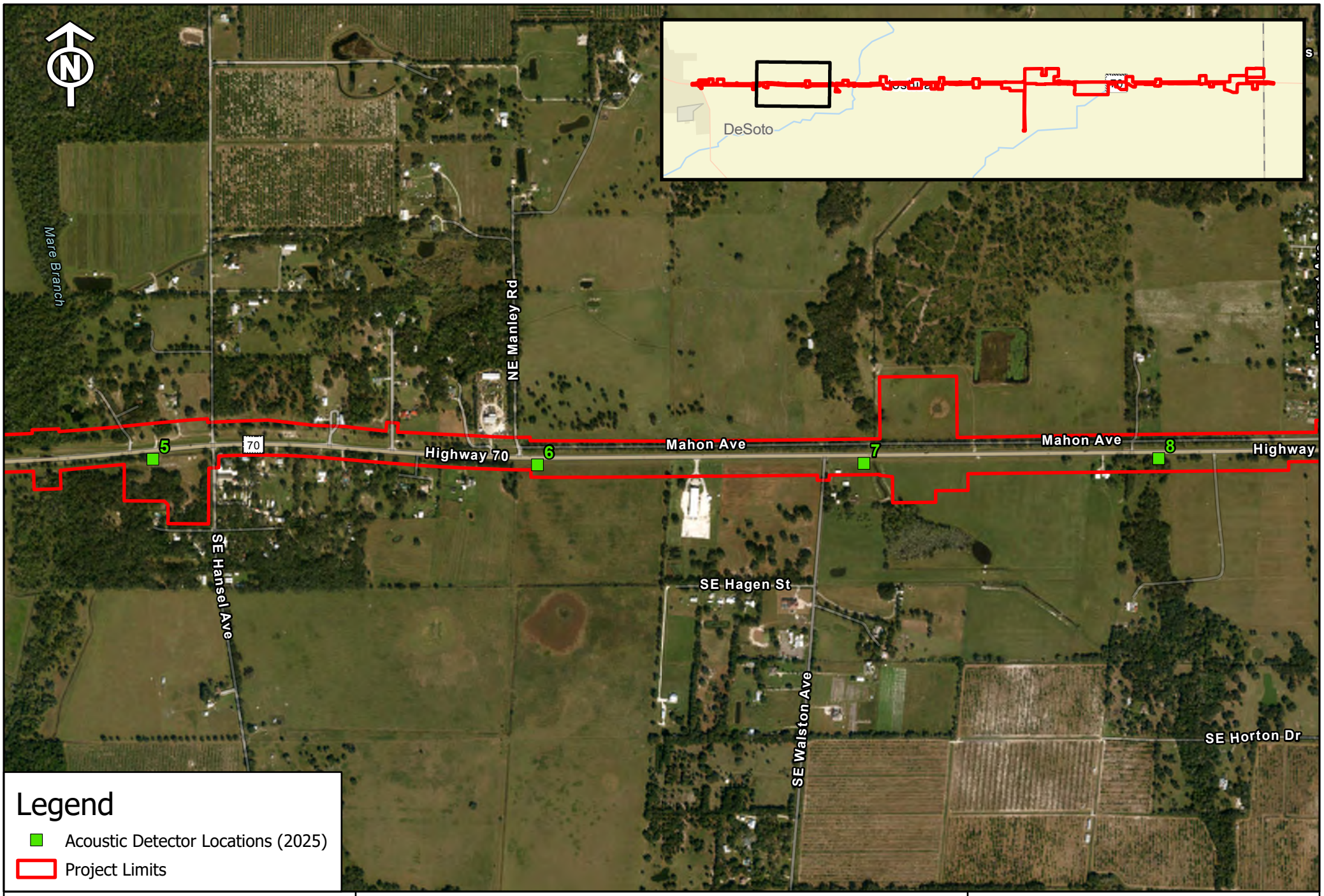

Figure 2-2 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.35 Miles

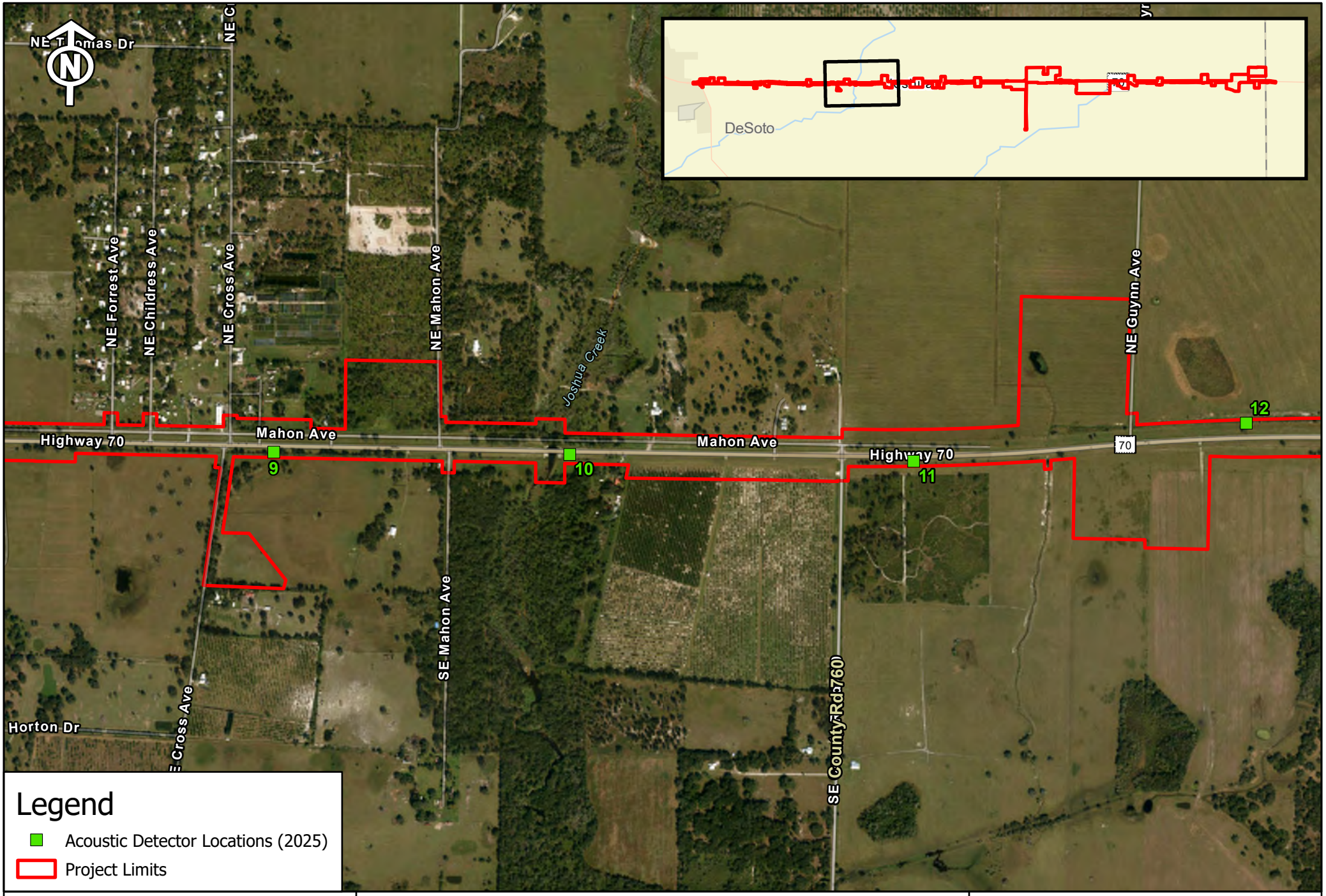

Figure 2-3 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

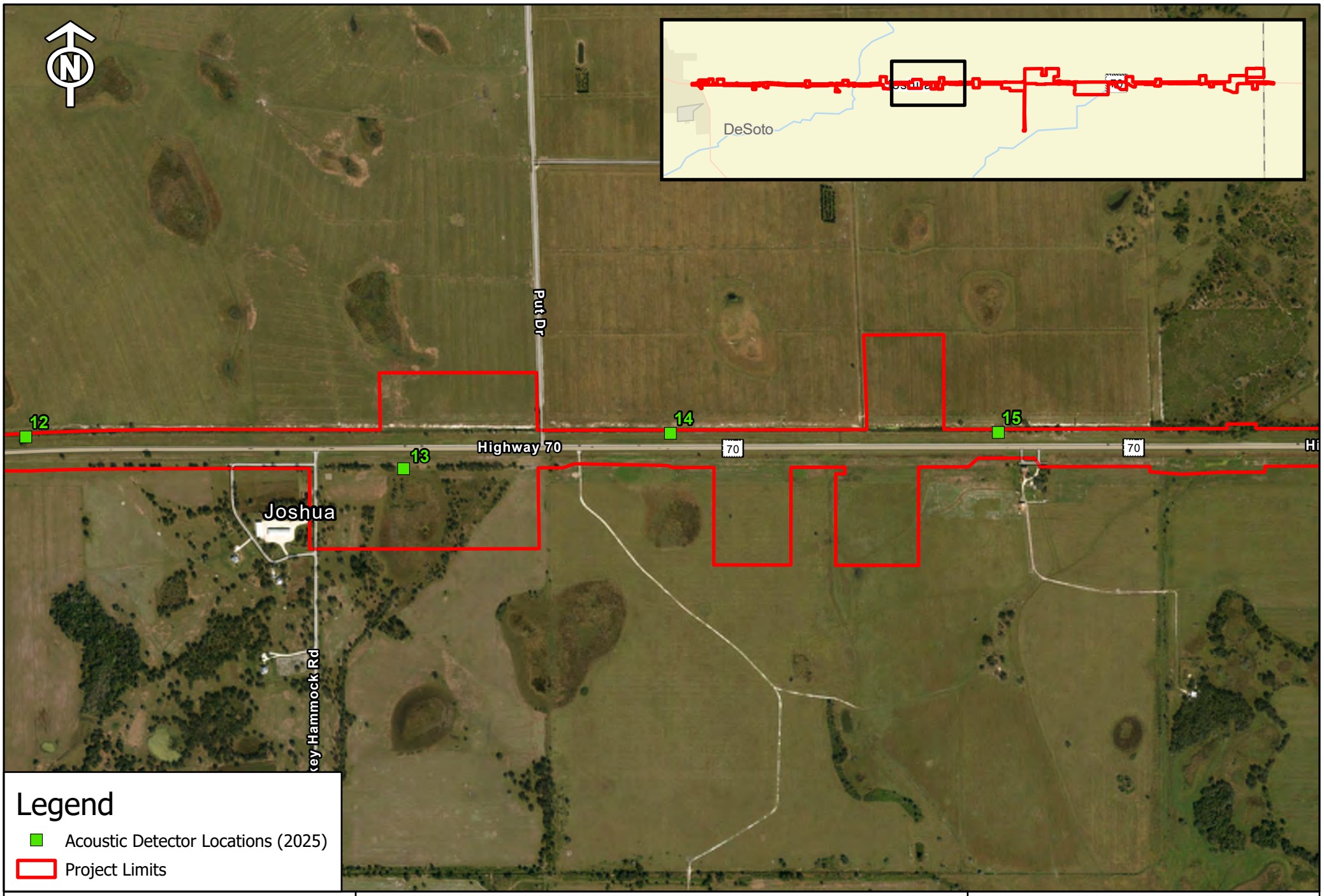

Figure 2-4 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

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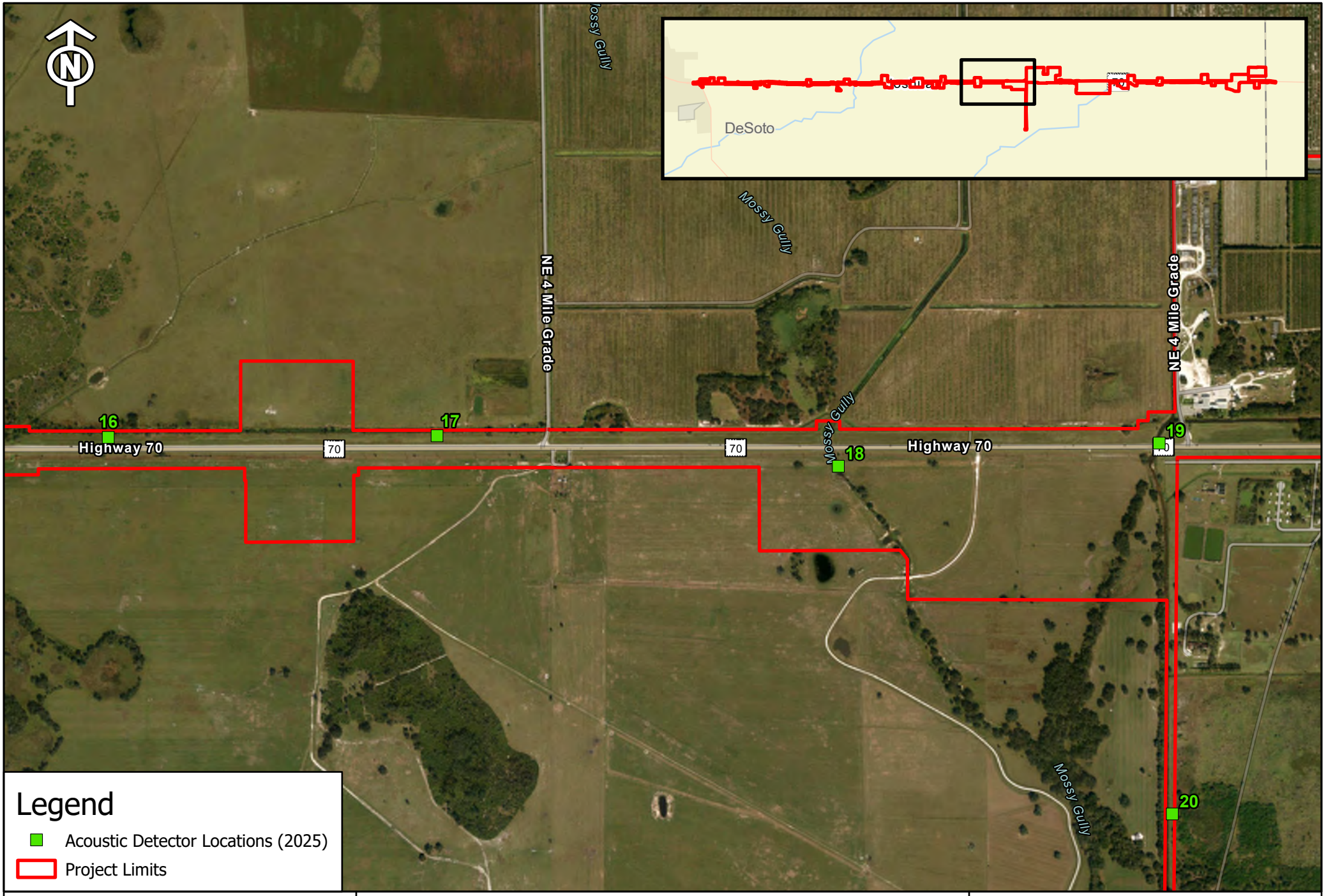

Figure 2-5 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

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DeSoto and Highlands Counties, Florida

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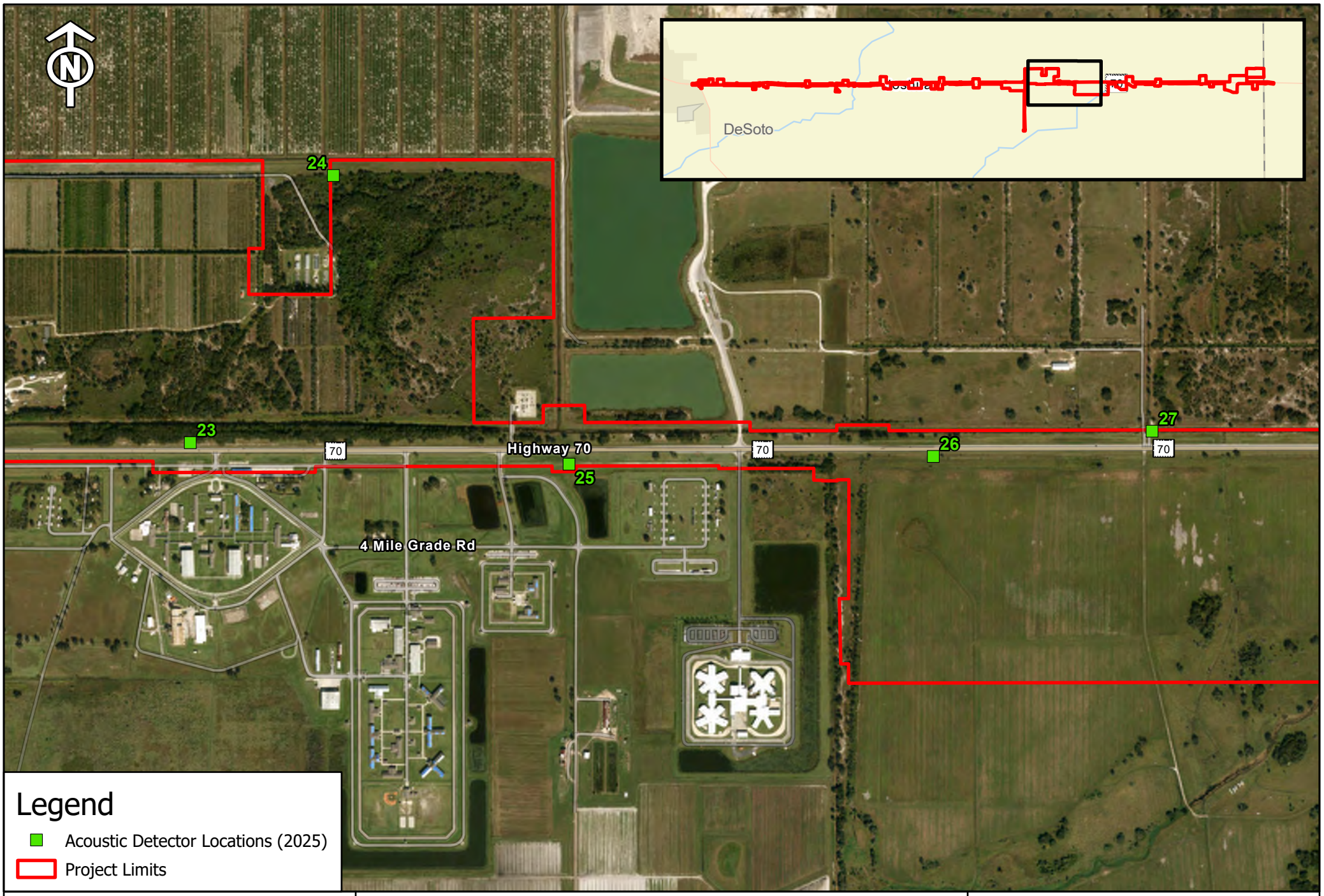

Figure 2-6 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

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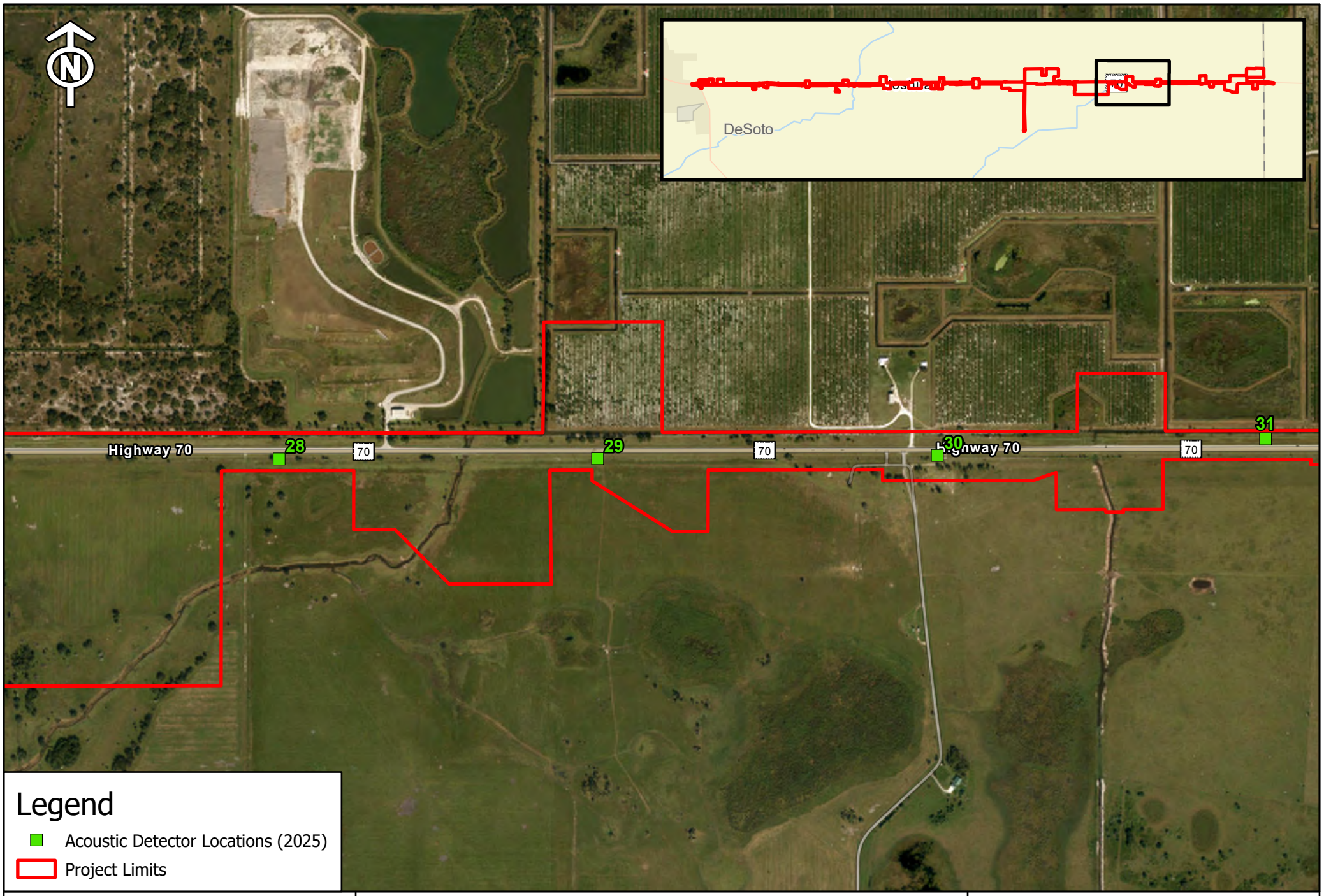

Figure 2-7 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

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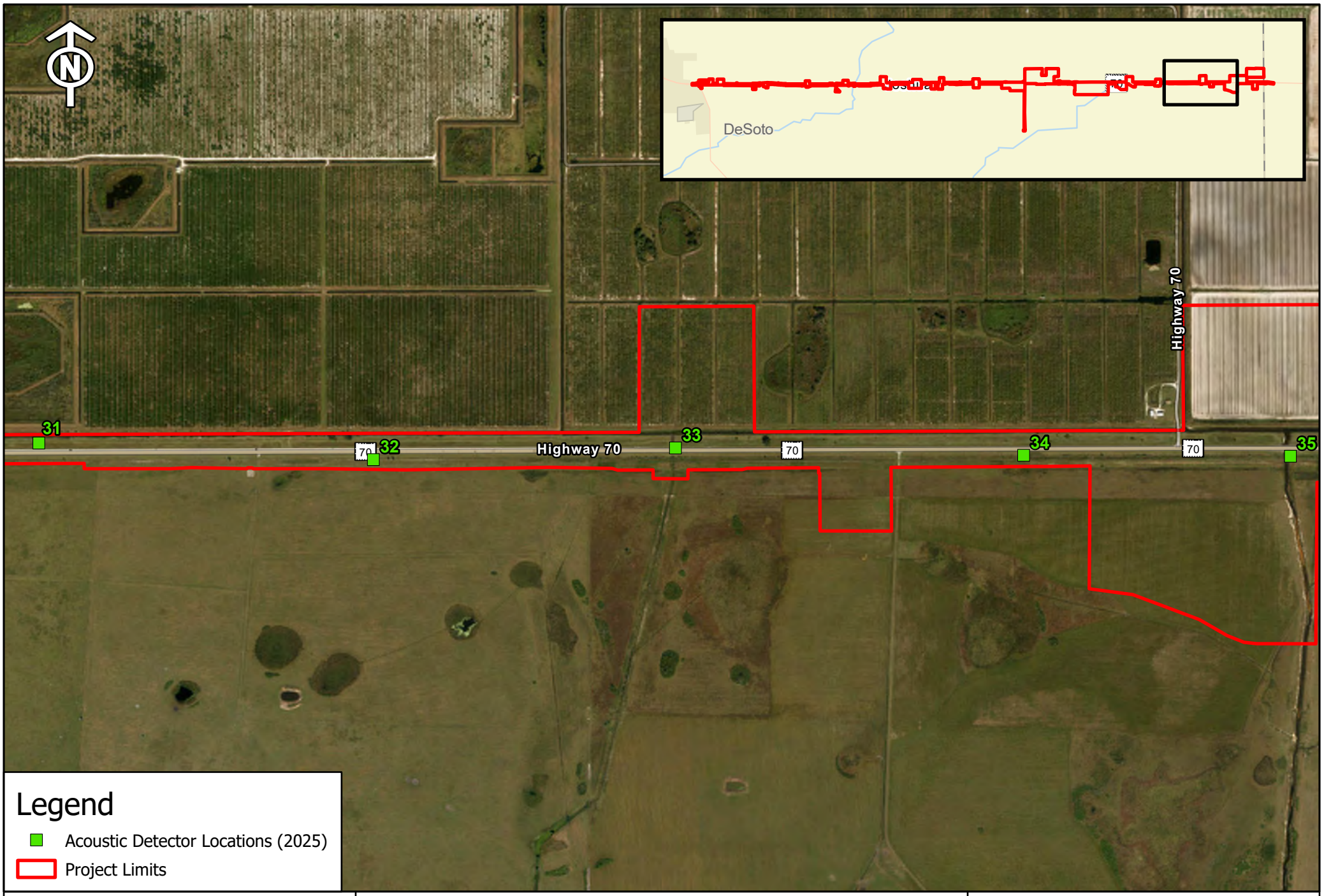

Figure 2-8 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

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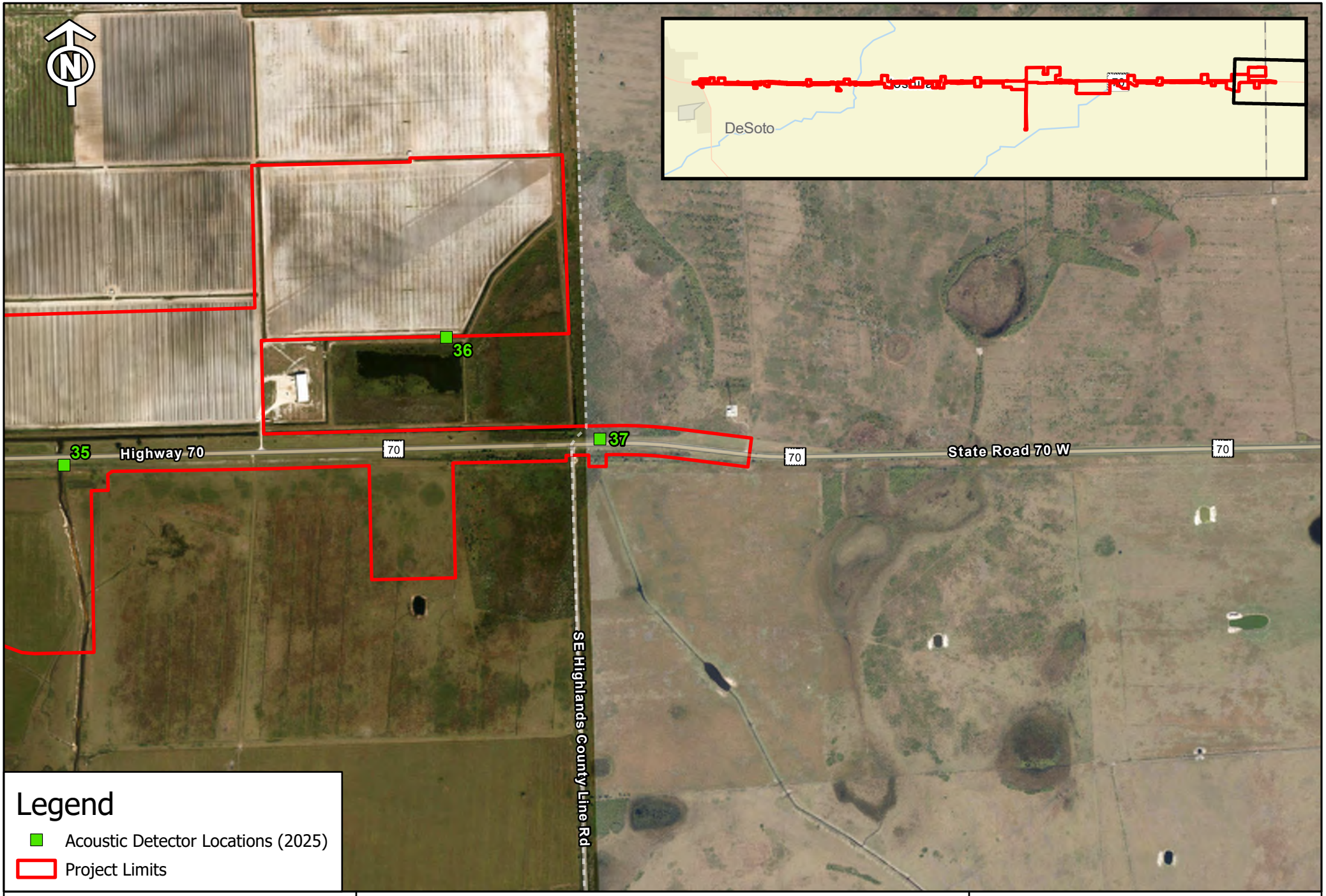

Figure 2-9 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.35 Miles

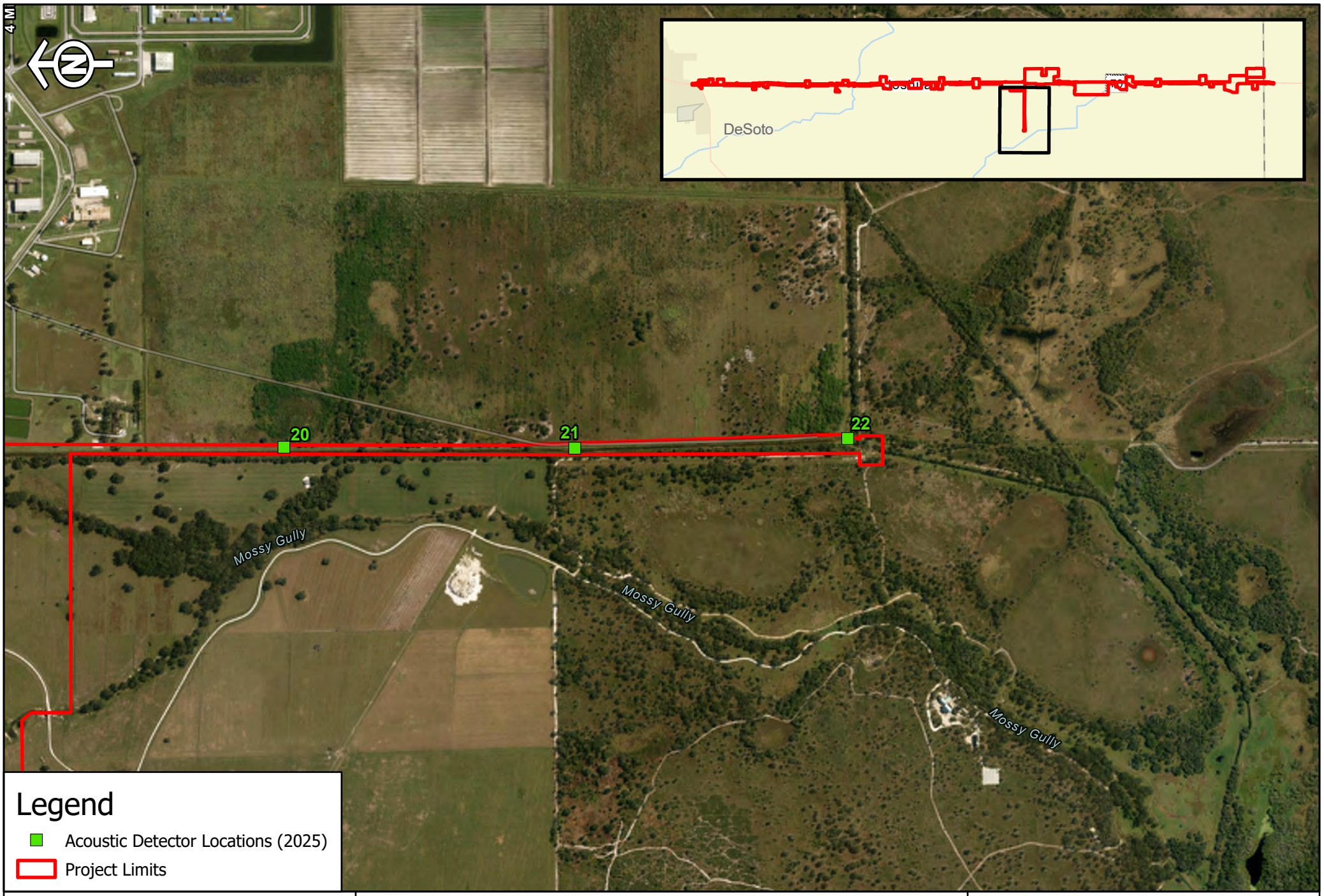

Figure 2-10 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.35 Miles

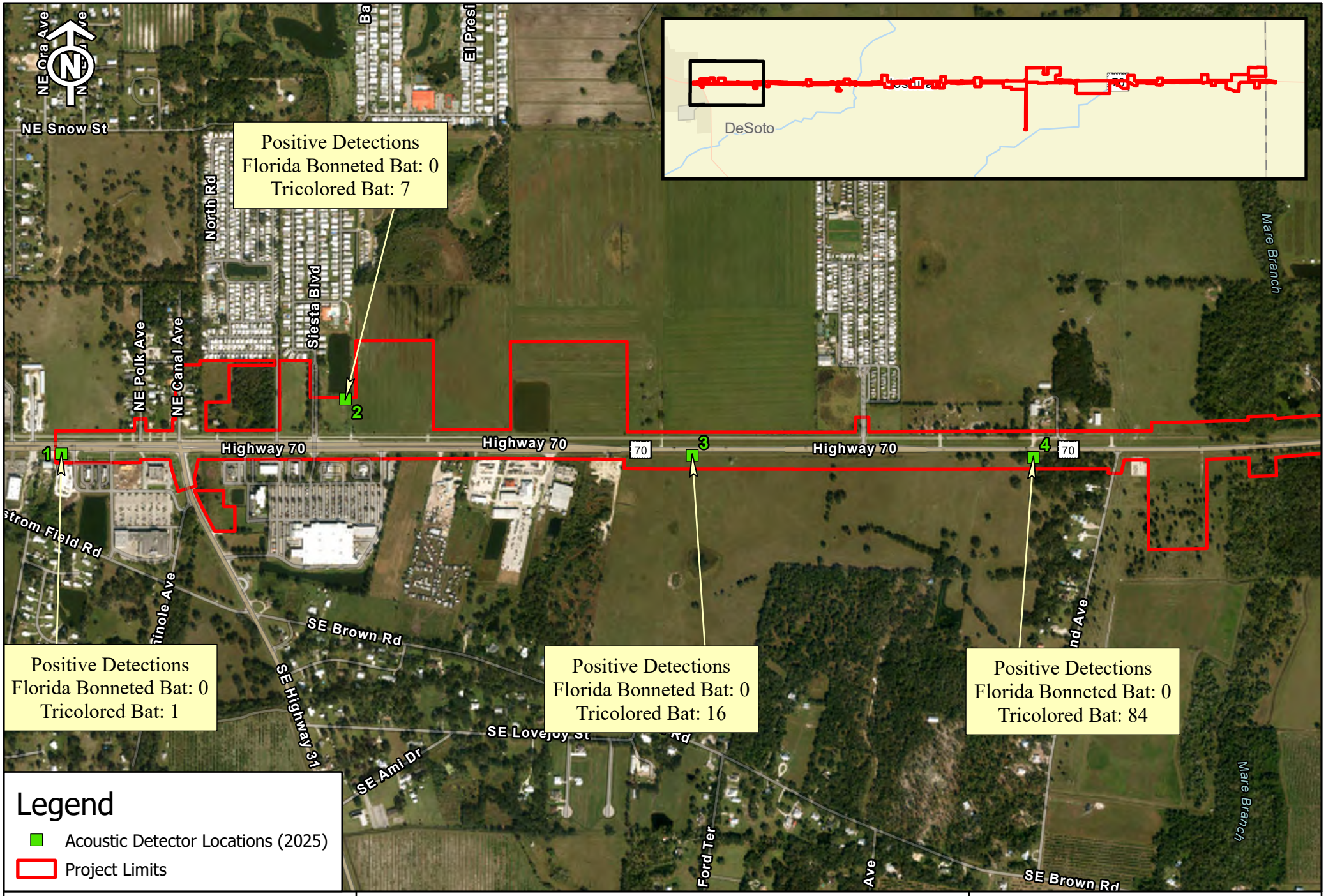

Figure 3-1 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.35 Miles

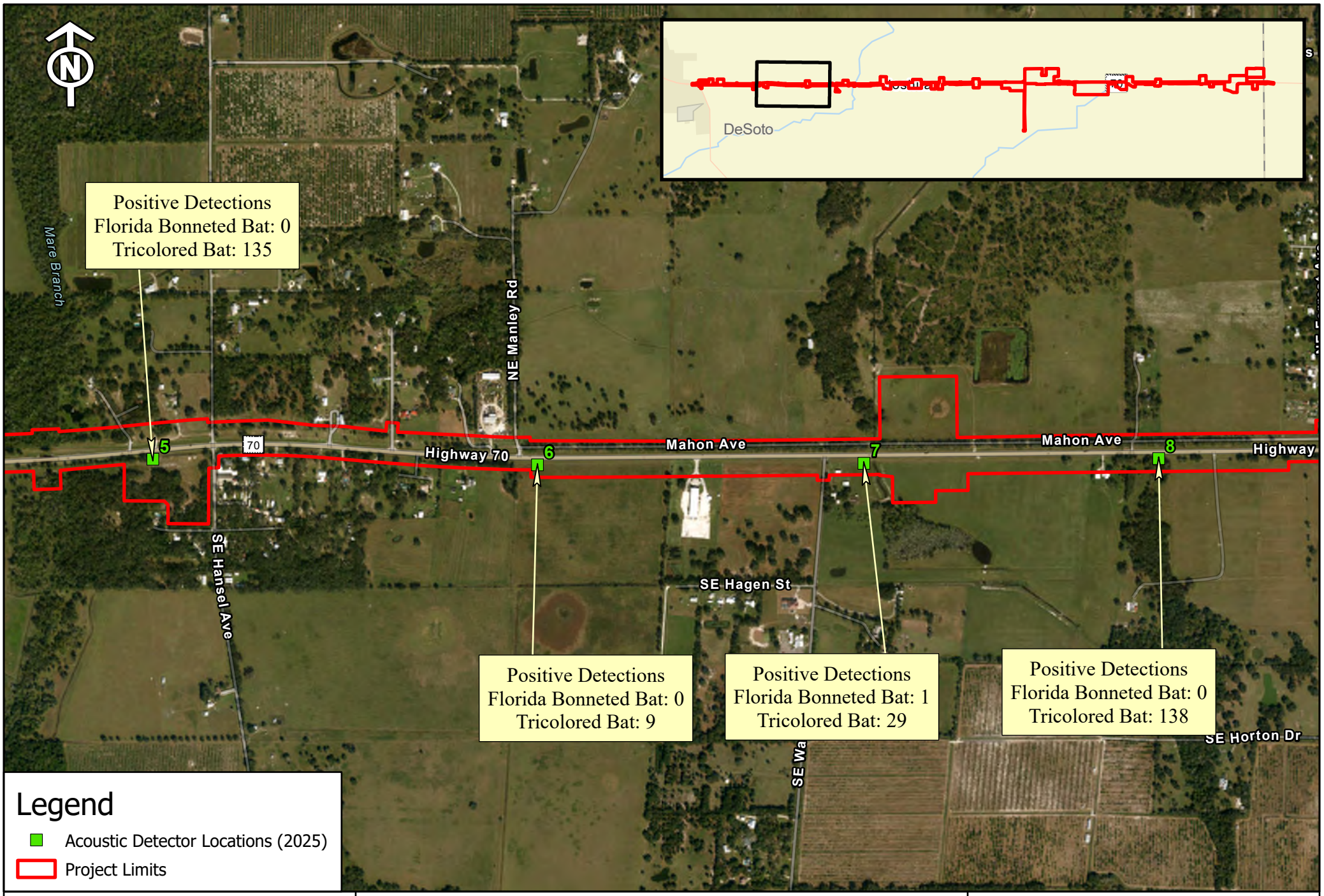

Figure 3-2 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

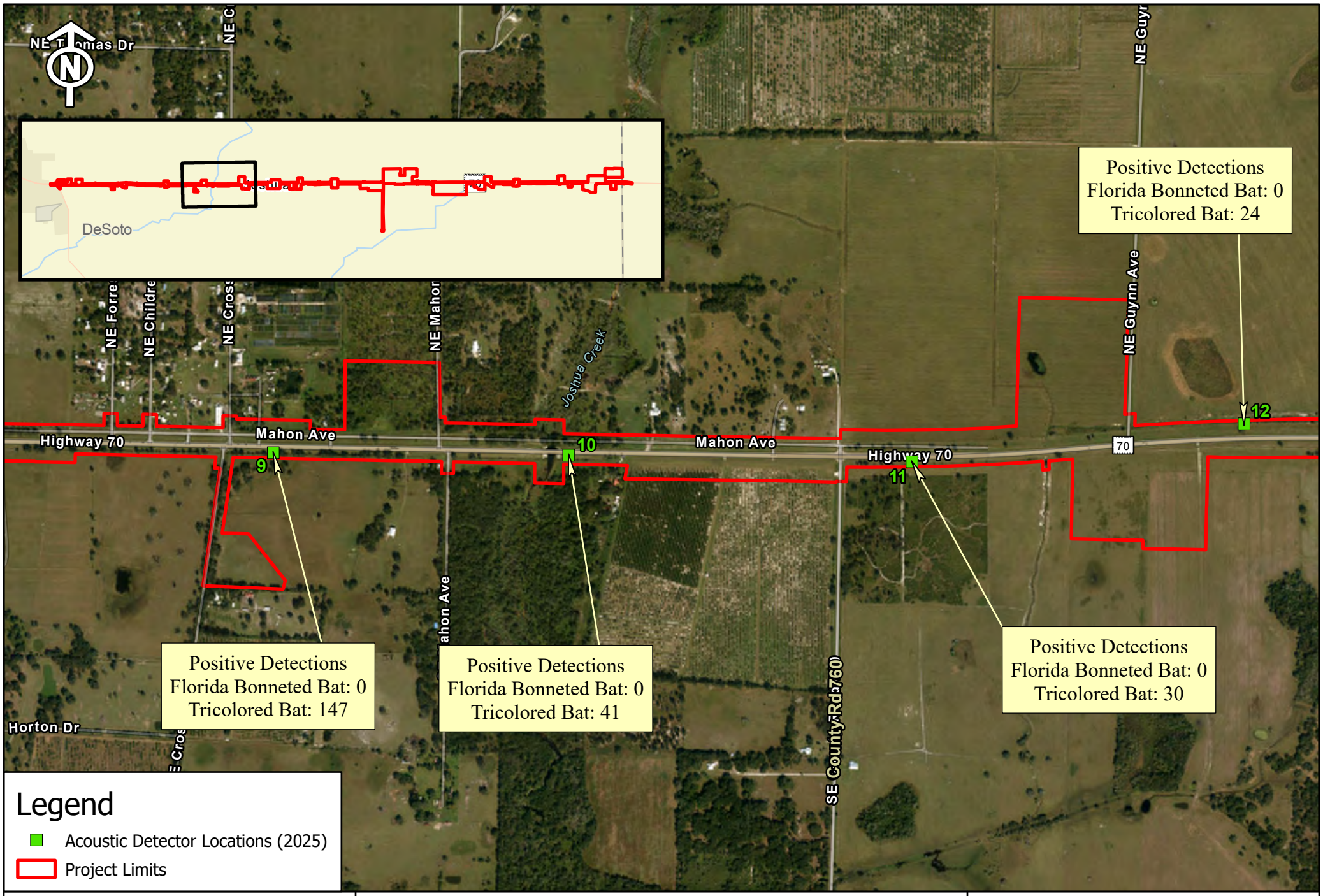

Figure 3-3 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
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0 0.35 Miles

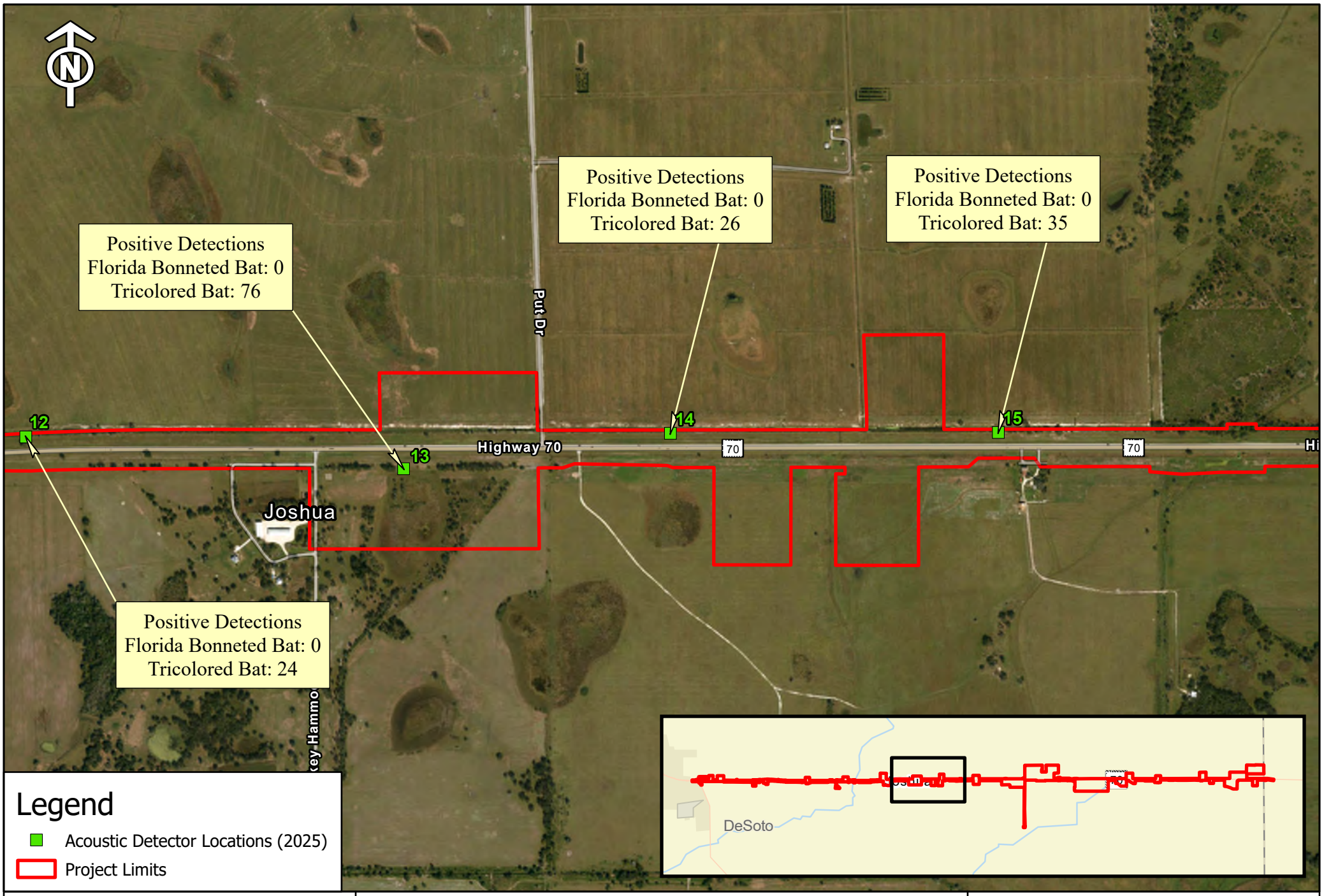

Figure 3-4 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.35 Miles

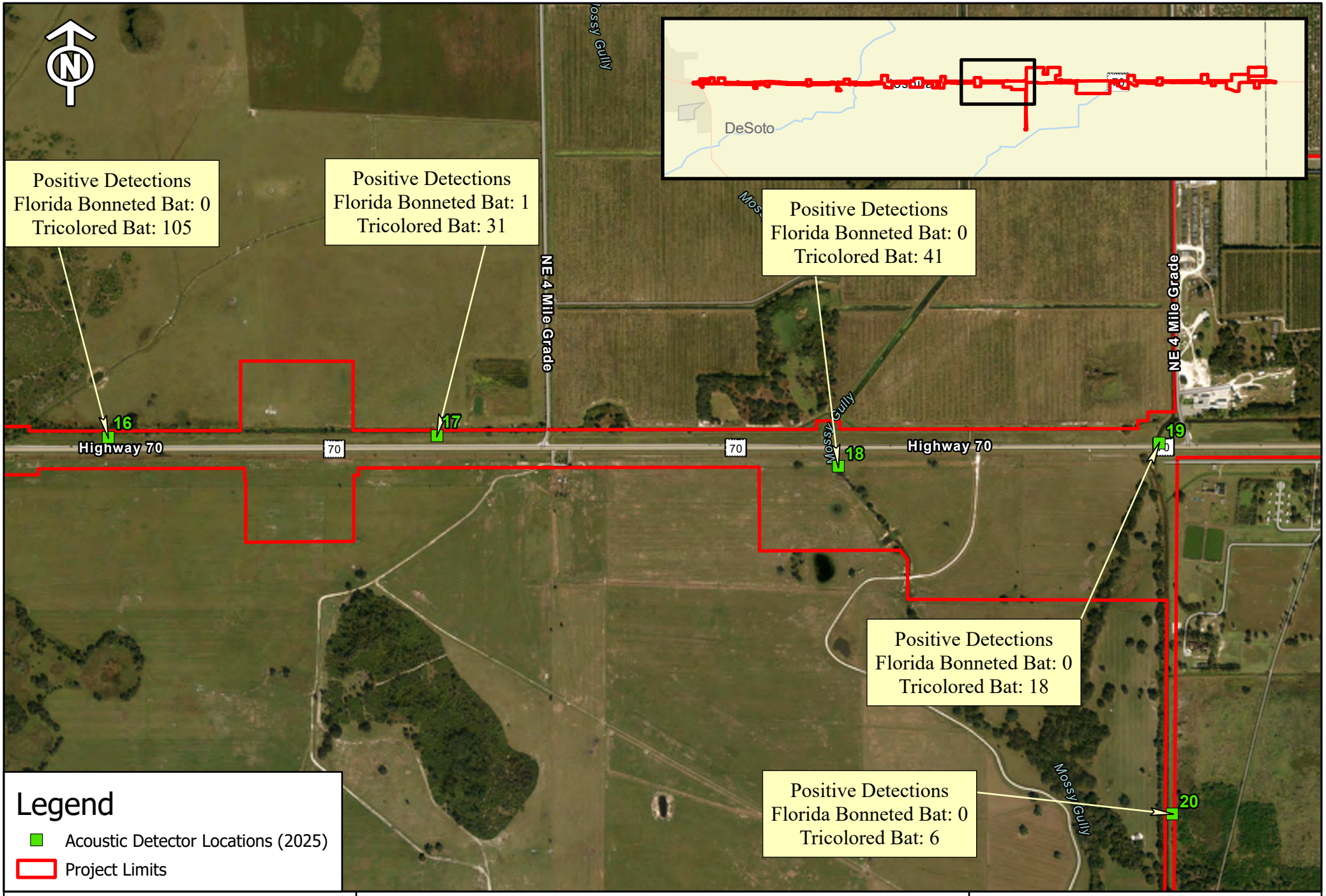

Figure 3-5 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.35 Miles

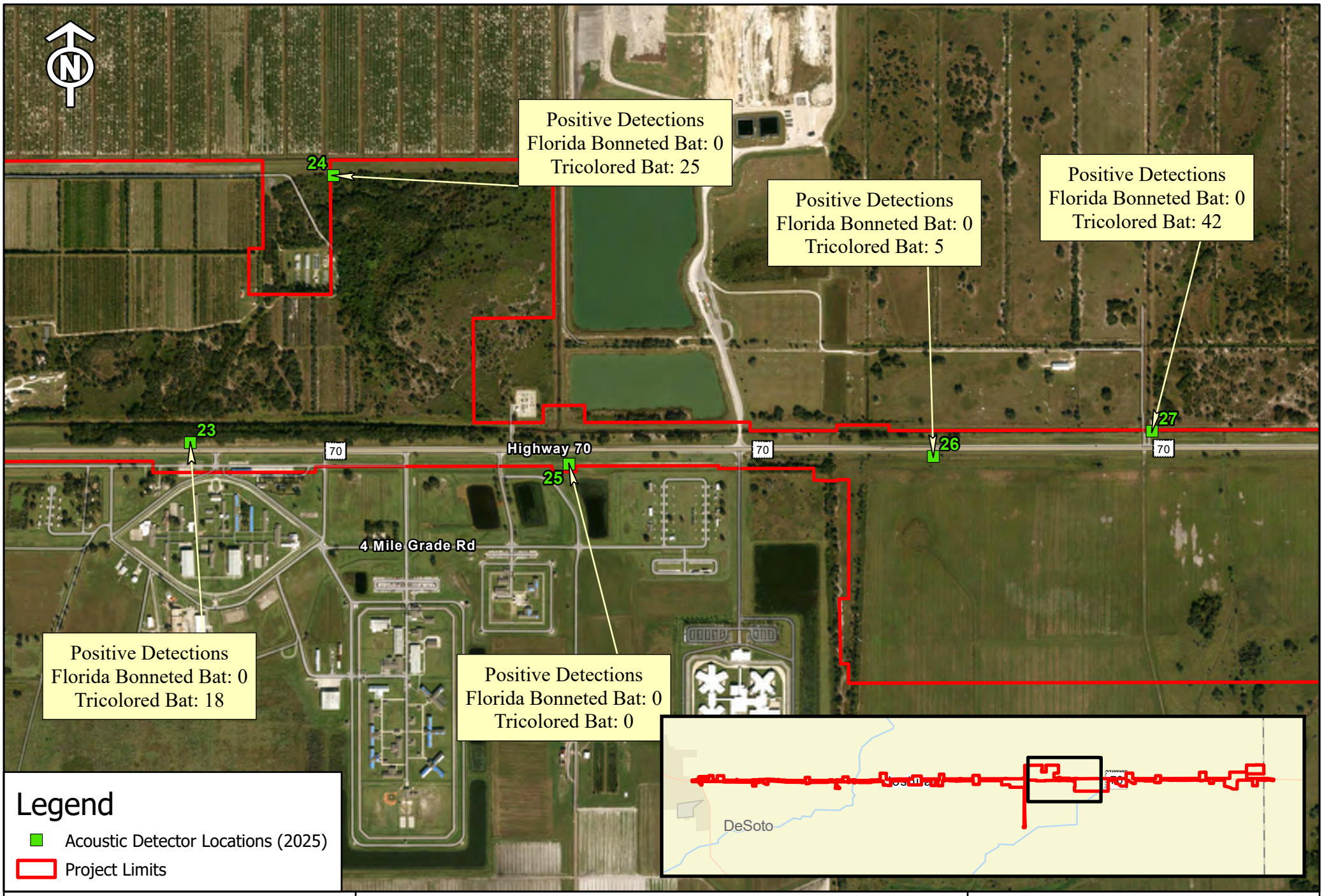

Figure 3-6 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

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0 0.35 Miles

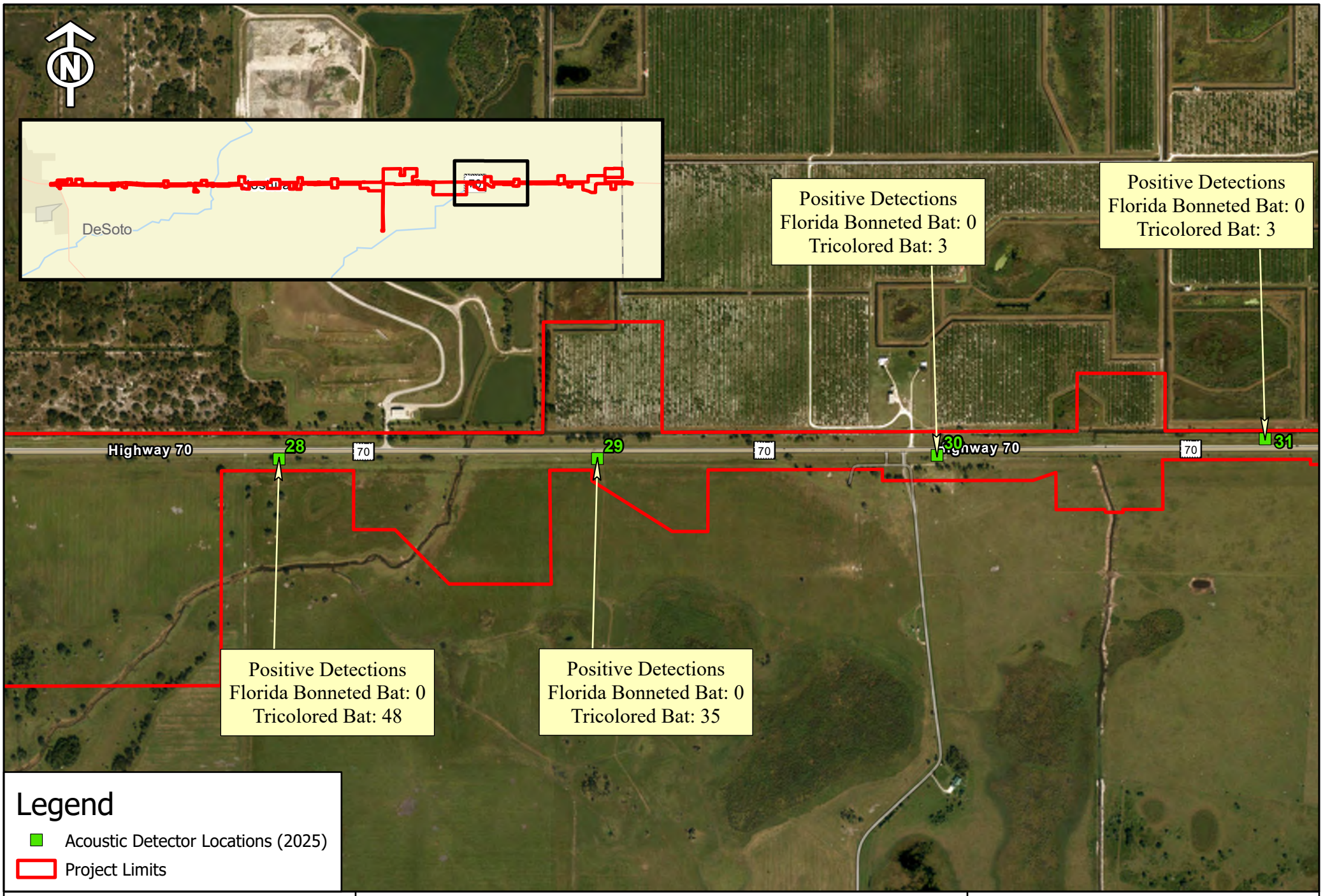

Figure 3-7 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

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0 0.35 Miles

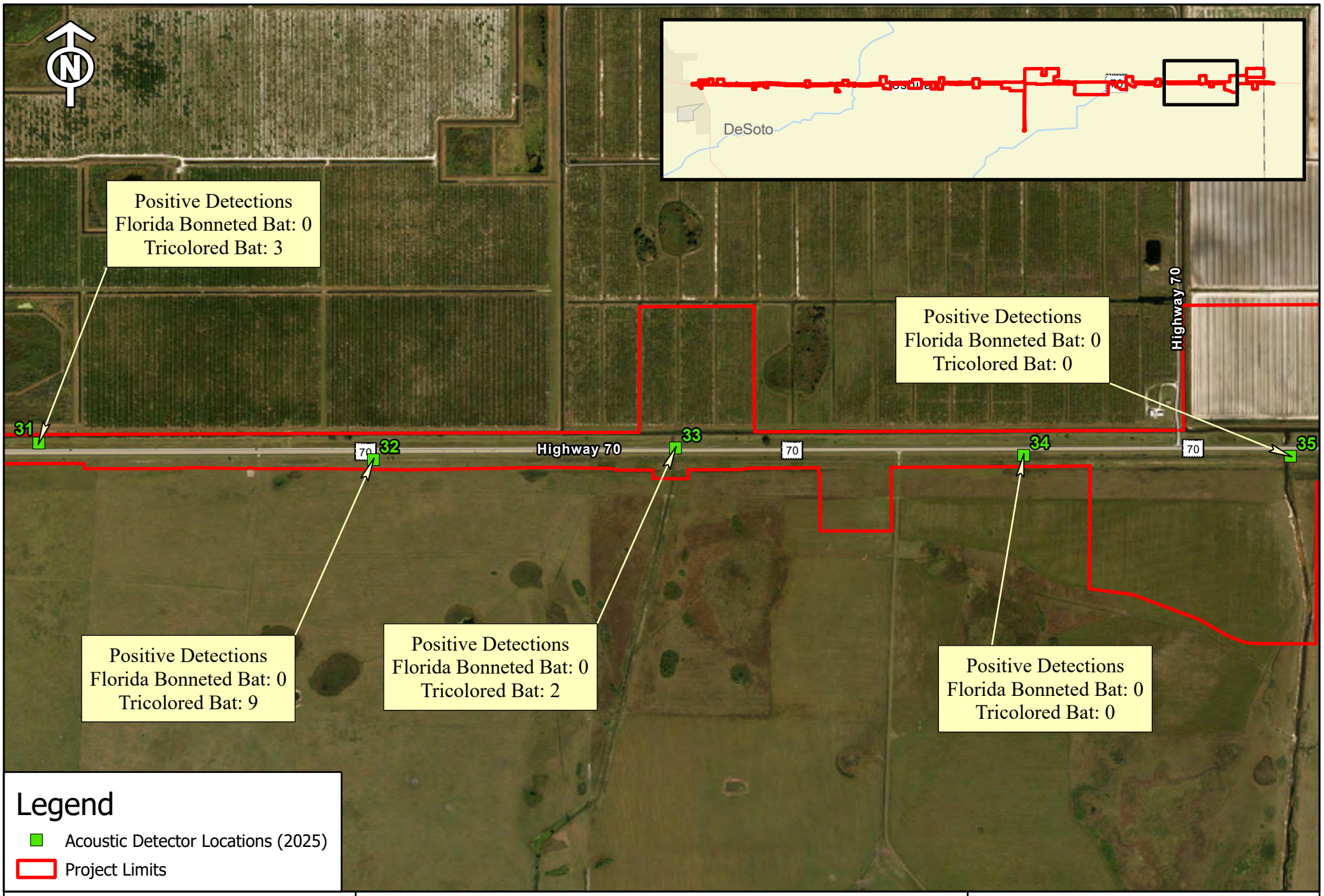

Figure 3-8 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

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0 0.35 Miles

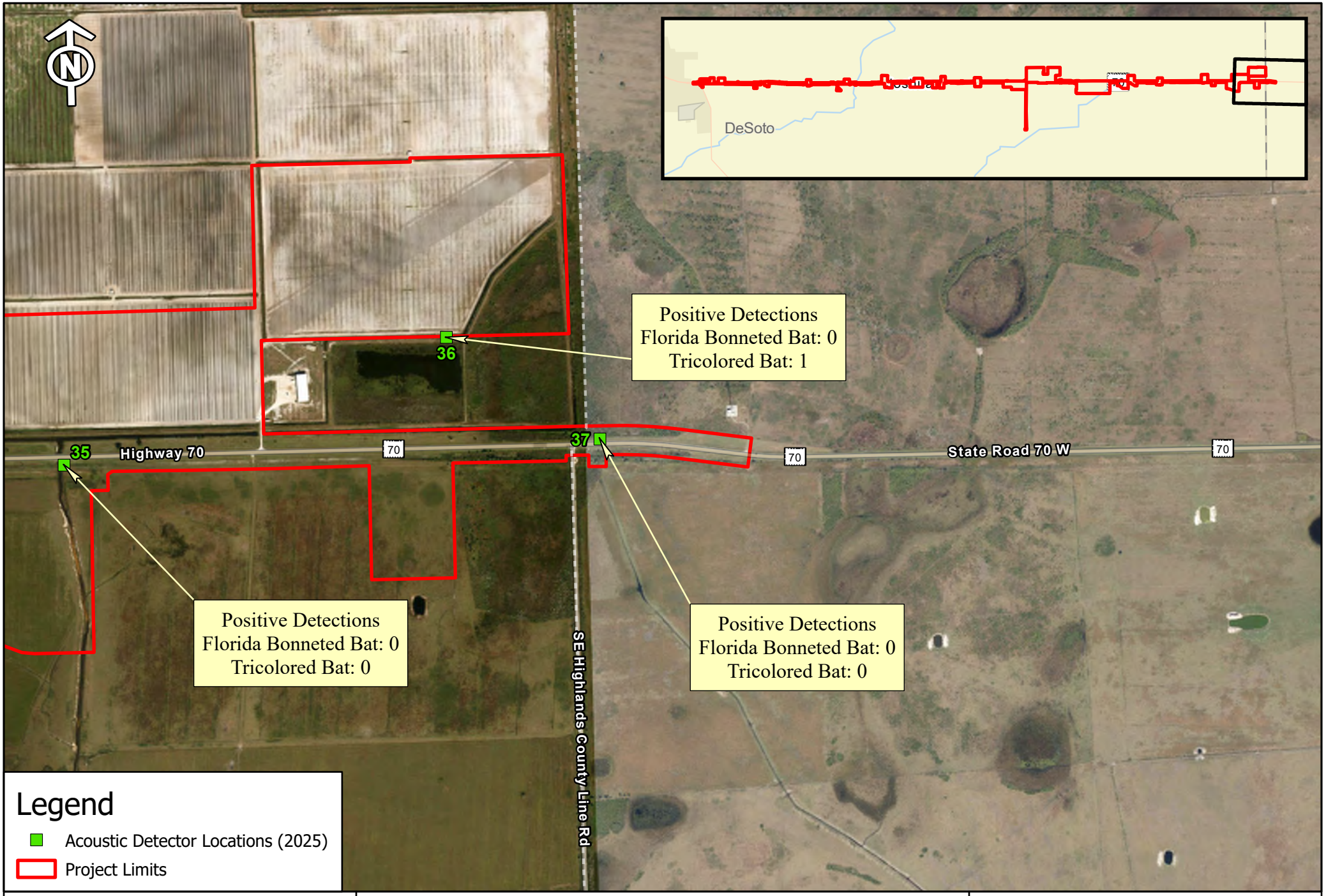

Figure 3-9 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

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0 0.35 Miles

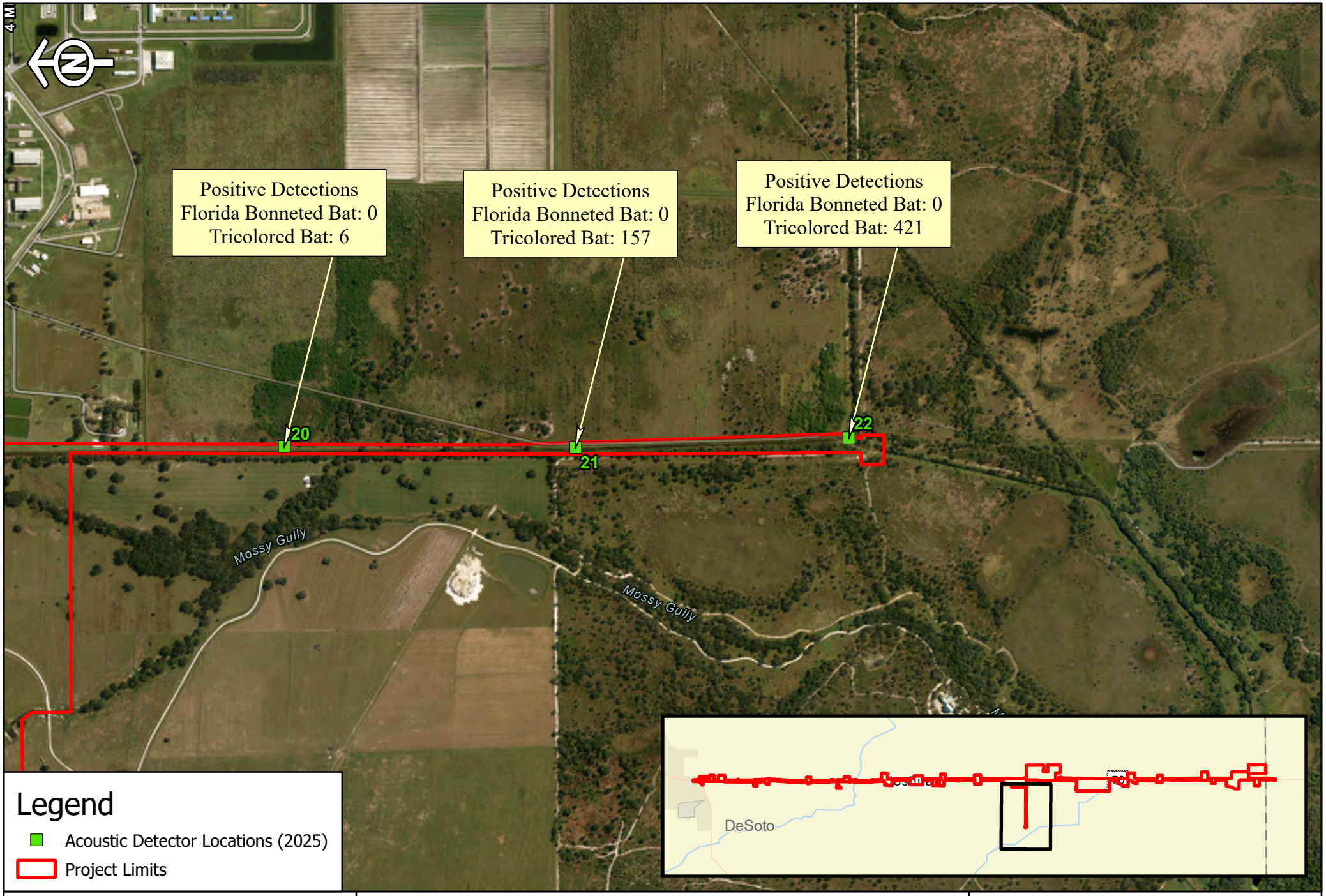


Figure 3-10 - Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Results Map

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.35 Miles

Appendix A

Survey Methodology Memorandum

memorandum

date	March 17, 2025
to	John Wrublik, U.S. Fish and Wildlife Service (USFWS)
cc	Matthew Dockins, PE, HNTB Corporation James Fine, HNTB Corporation Tori Kuba, Environmental Science Associates
from	Shannon Freemon, Environmental Science Associates
subject	Florida Bonneted Bat and Tricolored Bat Acoustic Survey Methodology Memorandum SR 70 from West of SR 31 to SE Highlands County Line Road FPID 451942-1-22-01 DeSoto and Highlands County, Florida

Introduction

This technical memorandum provides a summary of the proposed survey methodology to determine the potential for the presence of the federally endangered Florida bonneted bat (*Eumops floridanus*) and the federally proposed endangered tricolored bat (*Perimyotis subflavus*) within the limits of the SR 70 from west of SR 31 to the Highlands County Line proposed project (**Figure 1**). The project is located within the U.S. Fish and Wildlife Service (USFWS) Consultation Area for the Florida bonneted bat and within the range for the tricolored bat. The Florida bonneted bat was federally designated as an endangered species by the USFWS in 2013 (78 Federal Register 61003 61043) and is protected by the Endangered Species Act, as amended (16 U.S. Code (U.S.C.) 1531-1544, 87 Stat. 884). Based on the availability of potential roosting and foraging habitat and the project's size being greater than five acres, a species-specific Florida bonneted bat acoustic survey was determined to be necessary for this project. The tricolored bat was proposed for listing as an endangered species in 2022 (87 Federal Register 56381 56393). Although not yet listed, due to the project's location in the tricolored bat range, results of the acoustic survey will be analyzed for the presence of tricolored bats in addition to Florida bonneted bats.

Preliminary Data Collection

A comprehensive literature and Geographic Information System (GIS) database search was conducted for the project area to determine if the Florida bonneted bat and/or tricolored bat was previously documented within the project limits and if suitable roosting or foraging habitat was available. The literature and database search included the following: 2020 Southwest Florida Water Management District (SWFWMD) Land Use Land Cover spatial data, 2023 USFWS National Wetlands Inventory spatial data, 2024 USFWS Florida Bonneted Bat Consultation Guidelines, 2024 USFWS Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines, species-specific spatial data (i.e., range, critical habitat, etc.), and current aerial imagery.

Based on this preliminary protected species data collection effort, Florida bonneted bat and tricolored bat findings include the following:

- The project falls within the USFWS Florida bonneted bat Consultation Area (CA);
- The project does not fall within a USFWS Florida bonneted bat assumed presence polygon;
- The project does not fall within a USFWS Florida bonneted bat Critical Habitat (CH) polygon,
- The project falls within the USFWS range for the tricolored bat; and
- Potentially suitable foraging and roosting habitat was identified within the project boundary for both species.

Proposed Field Survey Methodology

The acoustic survey methodology outlined in the 2024 USFWS Florida Bonneted Bat Consultation Guidelines (USFWS 2024) for linear projects that contain potential roosting and foraging habitat will be followed for the Florida bonneted bat. While the 2024 USFWS Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines Appendix J Guidance for Surveying Year-Round Active Northern Long-eared Bats (USFWS 2024) is currently approved for use for the tricolored bat for FDOT by the USFWS, the survey requirements are generally less stringent than those required for the Florida bonneted bat. As a result, minimum requirements of the 2024 USFWS Florida Bonneted Bat Consultation Guidelines for linear projects will be adhered to. Survey results for the tricolored bat are valid only if conducted between March 1 and October 15. Based on the guidelines, the project mainline and ponds will require surveys for a minimum of nine (9) detector nights per 0.6 miles. A total of thirty-seven (37) acoustic monitoring stations were developed based on the guidelines, project length (approximately 11.1 miles), and evaluation of habitat within the project area. The proposed 37 acoustic monitoring station locations are depicted in the attached figure (**Figure 2**).

To maximize the detection of Florida bonneted and tricolored bats, each monitoring station will be placed in an area that could be used as a potential flight path for the bat species. This includes targeting areas which may provide potential roosting or foraging habitat such as a cluster of pine trees, a section of cypress swamp/dome, an area with snags, or a water feature. At each monitoring station, a Wildlife Acoustics Song Meter SM4BAT Full Spectrum (FS) acoustic detector will be deployed by qualified biologists who are trained and experienced in setting up, operating, and maintaining bat acoustic detection equipment. The detectors will be set to record 15-second file lengths and have a two-second trigger window based on training received from industry experts and the current 2024 USFWS Florida Bonneted Bat Consultation Guidelines. Each detector will be set to automatically begin collecting data continuously from 30 minutes before sunset to 30 minutes after sunrise for nine (9) consecutive nights at each station. If any of the following weather conditions exist during acoustic sampling, the time and duration will be noted and the acoustic sampling effort for that night repeated:

- Temperatures fall below 60°F during the first five (5) hours of the survey period;
- Precipitation, including rain and/or fog, that exceeds 30 minutes or continues intermittently during the first five (5) hours of the survey period; or
- Sustained wind speeds greater than nine (9) miles per hour for 30 minutes or more during the first five (5) hours of the survey period.

Per the 2024 guidelines, should it take longer than 14 days to attain the 9 valid nights, the Florida bonneted bat recovery lead will be contacted.

At each monitoring station, an omnidirectional Wildlife Acoustic SMM-U2 External Ultrasonic Microphone, placed on an extendable pole approximately 10 feet in height, will be deployed. A minimum distance of 300 meters will be maintained between deployed detectors. The microphone will be situated in an area clear of vegetation two

(2) meters in all directions and be fully free of vegetative or other clutter from ground to sky. Microphones will be directed away surrounding vegetation, from electrical wires and transmission lines, echo-producing surfaces including open water, and away from potential external noise sources. Metadata for each detector, consistent with the Acoustic Detector Deployment Example Data Sheet included in the 2024 USFWS Florida Bonneted Bat Consultation Guidelines, will be documented.

The Waveform Audio (WAV) files recorded at each monitoring station will be analyzed using Wildlife Acoustics Kaleidoscope Pro's latest version. The auto-identification parameters utilized via Kaleidoscope Pro include Bats of North America, region Florida, and the sensitivity setting utilized will be zero balanced (neutral). The species to be selected in the auto identification classifier include: big brown bat (*Eptesicus fuscus*), Florida bonneted bat, eastern red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*), northern yellow bat (*Lasiurus intermedius*), Seminole bat (*Lasiurus seminolus*), southeastern myotis (*Myotis austroriparius*), northern myotis (*Myotis septentrionalis*), evening bat (*Nycticeius humeralis*), tricolored bat, silverhaired bat (*Lasionycteris noctivagans*), velvety free-tailed bat (*Molossus molossus*), gray myotis (*Myotis grisescens*), and Brazilian free-tailed bat (*Tadarida brasiliensis*).

The bat acoustic data will be retrieved, saved, analyzed, and interpreted by experienced qualified biologists who have taken one or more bat acoustic courses/workshops and who have also previously reviewed Florida bonneted bat and tricolored bat echolocations using Kaleidoscope Pro. All echolocations auto identified by Kaleidoscope Pro as being created by a Florida bonneted bat or tricolored bat will be visually reviewed and manually verified by experienced biologists. The parameters used to manually verify a sequence of echolocations as coming from a Florida bonneted bat include the following:

- Whether the characteristic frequency of echolocations fall within the documented range (10-25 kilohertz [kHz]) for the Florida bonneted bat,
- Whether there are three (3) or more echolocations where the time between echolocations remains consistent across the sequence of echolocations,
- Whether the minimum frequency remains consistent across the sequence of echolocations,
- Whether the slope and bandwidth remains consistent from echolocation to echolocation, and
- Whether there is good signal to noise ratio as evidenced by a crisp, clean oscillogram.

If a series of echolocations only meet some of these requirements, and they are within the characteristic frequency of the Florida bonneted bat, these echolocations will be classified as potentially coming from a Florida bonneted bat. The WAV files not assigned an auto identification and classified by Kaleidoscope Pro as "No ID" with signatures at or below 30 kHz will also manually reviewed to determine if they were misclassified and could contain Florida bonneted bat echolocations.

The parameters used to manually verify a sequence of echolocations as coming from a tricolored bat include the following:

- Whether the characteristic frequency of echolocations fall within the documented range (40-60 kHz with the call bottom frequency between 40-45 kHz) for the tricolored bat,
- Whether there are three (3) or more echolocations where the time between echolocations remains consistent across the sequence of echolocations,
- Whether the minimum frequency remains consistent across the sequence of echolocations,
- Whether the slope and bandwidth remains consistent from echolocation to echolocation, and
- Whether there is good signal to noise ratio as evidenced by a crisp, clean oscillogram.

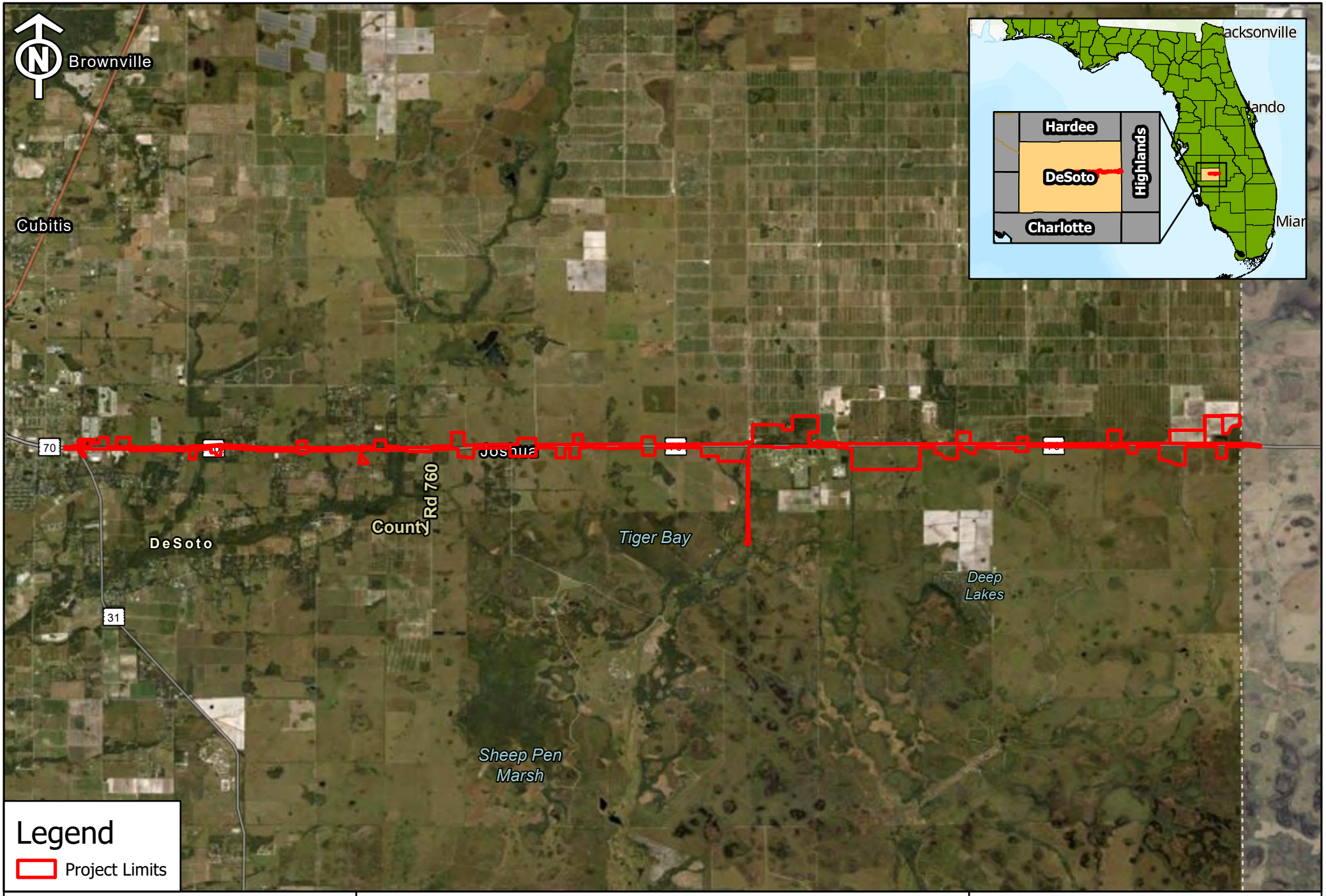
If a series of echolocations only meet some of these requirements, and they are within the characteristic frequency of the tricolored bat, these echolocations will be classified as potentially coming from a tricolored bat. The WAV files not assigned an auto identification and classified by Kaleidoscope Pro as "No ID" with signatures 40-60 kHz

will also manually reviewed to determine if they were misclassified and could contain tricolored bat echolocations. Per the 2024 USFWS Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines Appendix C Phase 2 Acoustic Surveys, qualitative analysis is necessary for the tricolored bat for linear projects when using an approved version of Kaleidoscope Pro if the maximum likelihood estimate (MLE) is > 0.05 for all site-nights and 10 or more passes are auto-classified as potentially belonging to tricolored bats at any site-night to reduce risk of false negatives.

The results of the Florida bonneted bat and tricolored bat call analysis will be assembled as required and uploaded into the NABat database. A report documenting the summary of the project, survey methods used, and survey results will be prepared following the survey. This will include an effect determination, explanation, and best management practices (BMPs) to be incorporated.

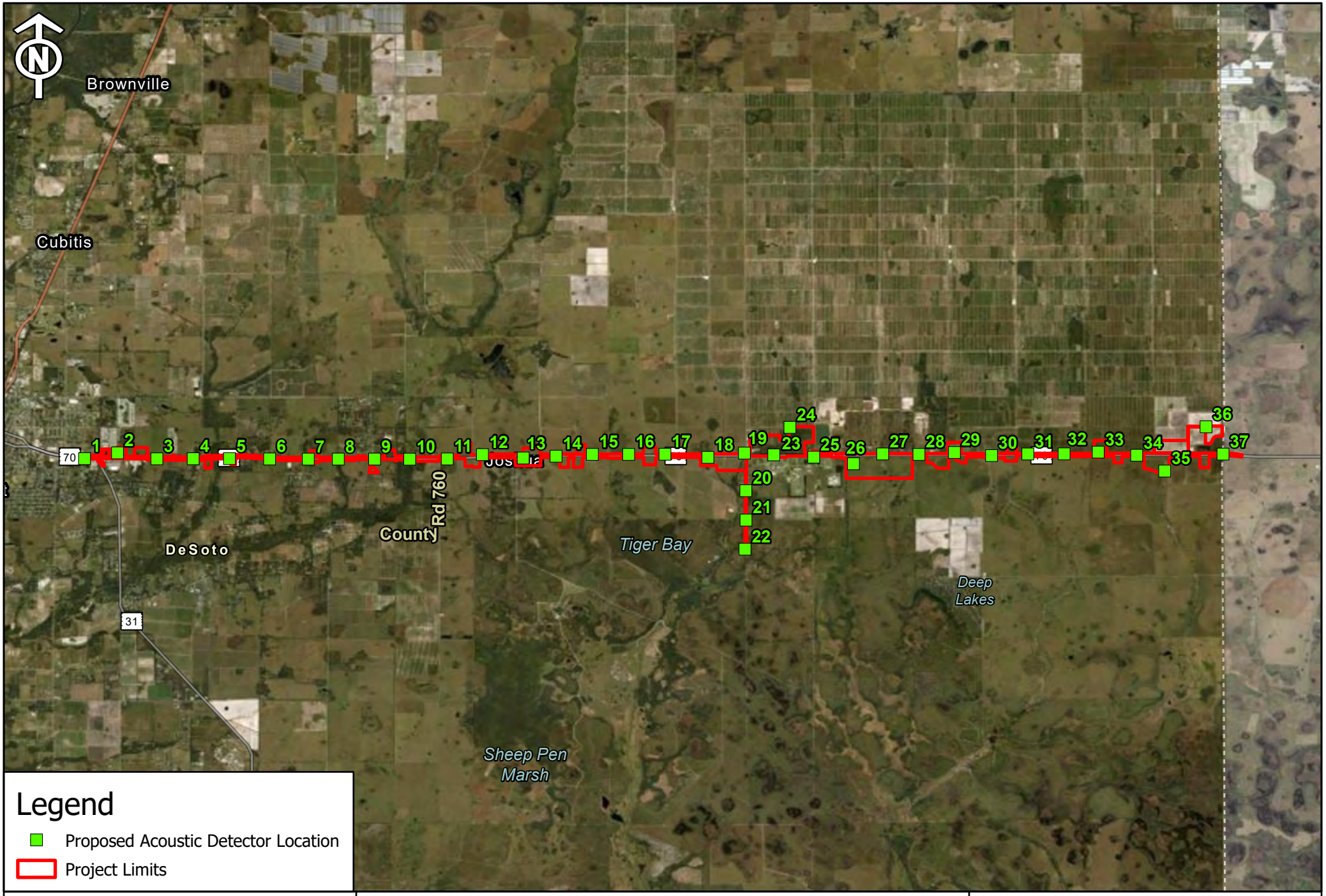
Figures

Figure 1 – Project Location
Figure 2 – Florida Bonneted Bat and Tricolored Bat Acoustic Survey Detector Locations Map



SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 1 - Project Location

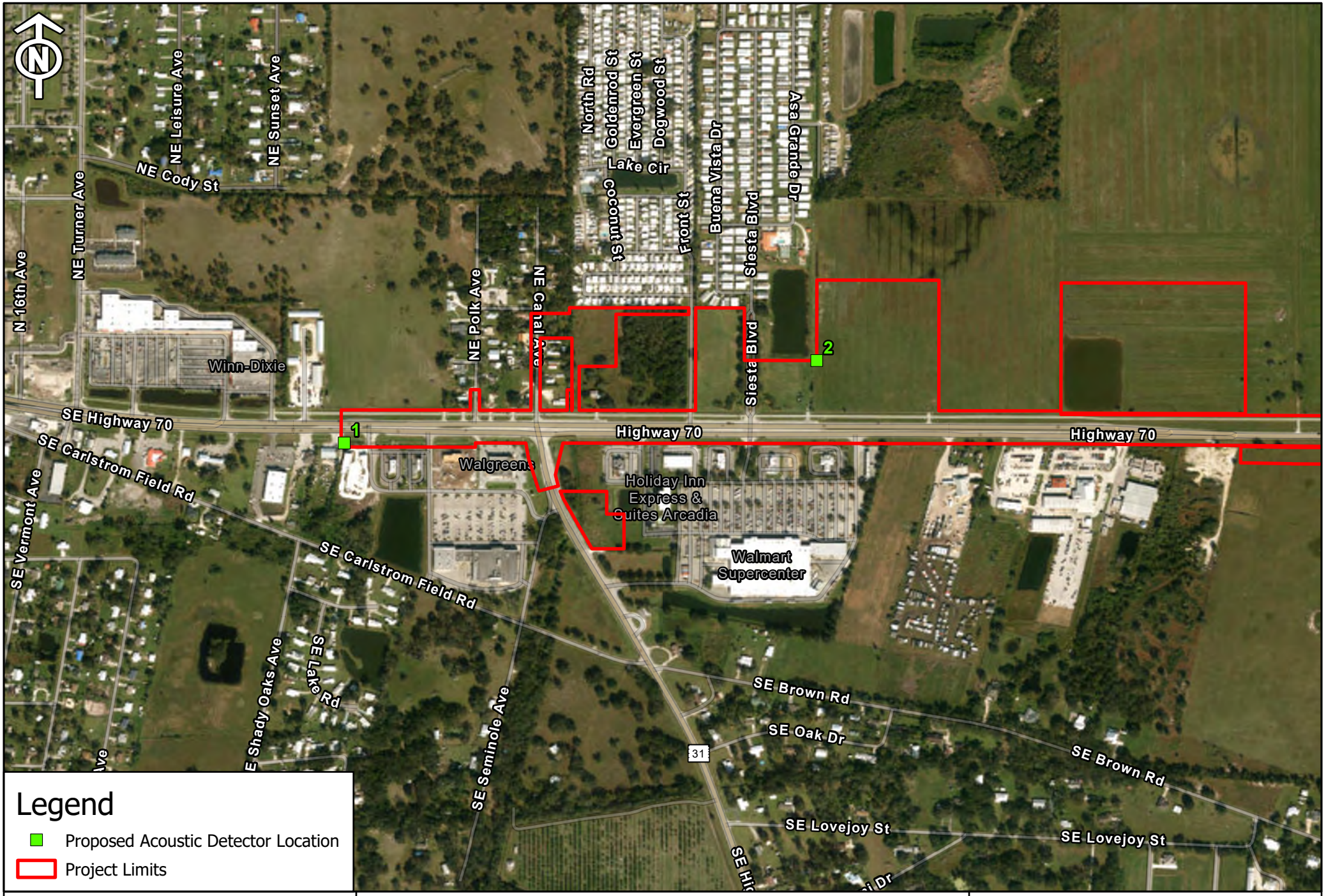
0 1 2 3 4 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-1 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

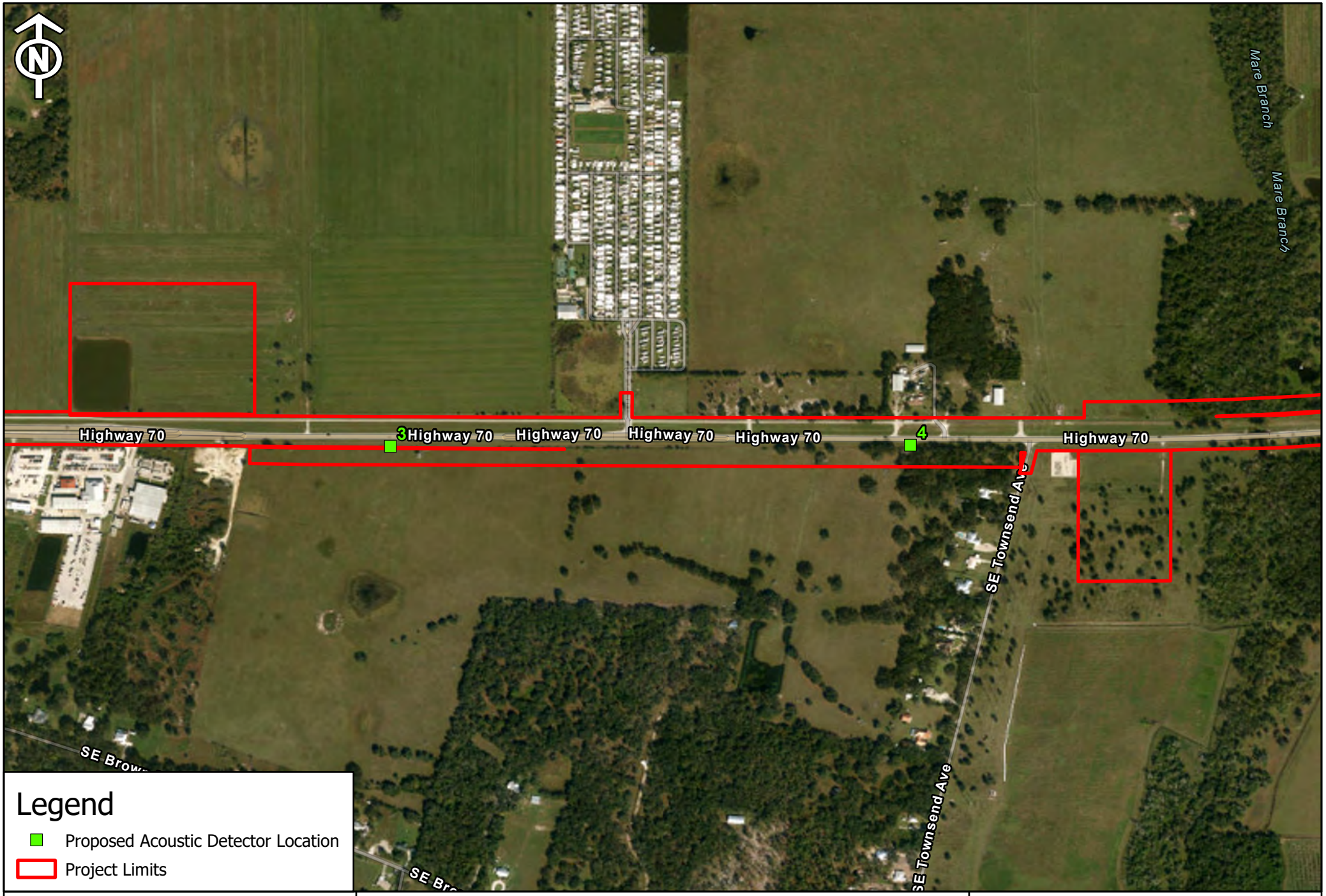
0 4.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-2 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

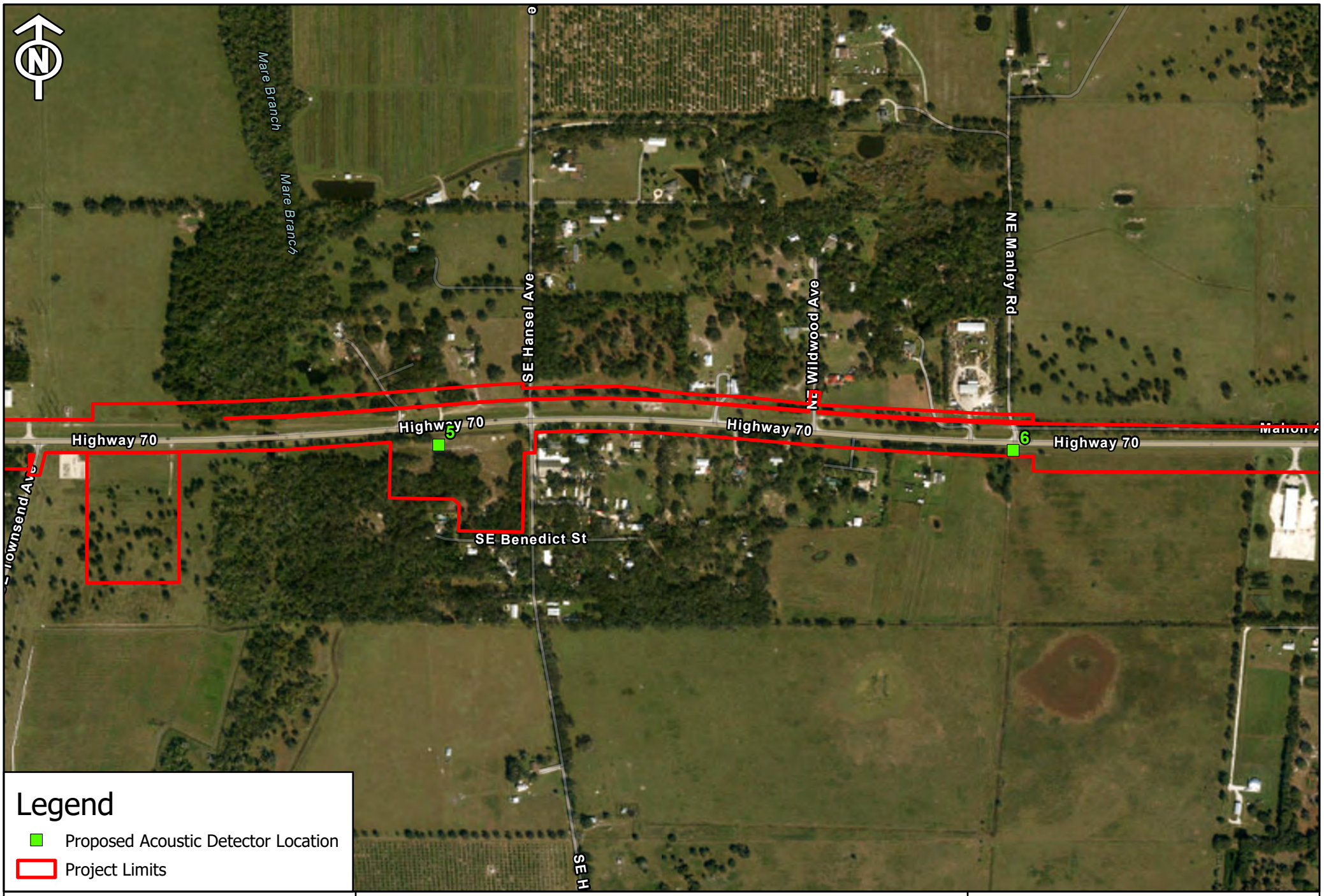
0 0.3 Miles



FDOT

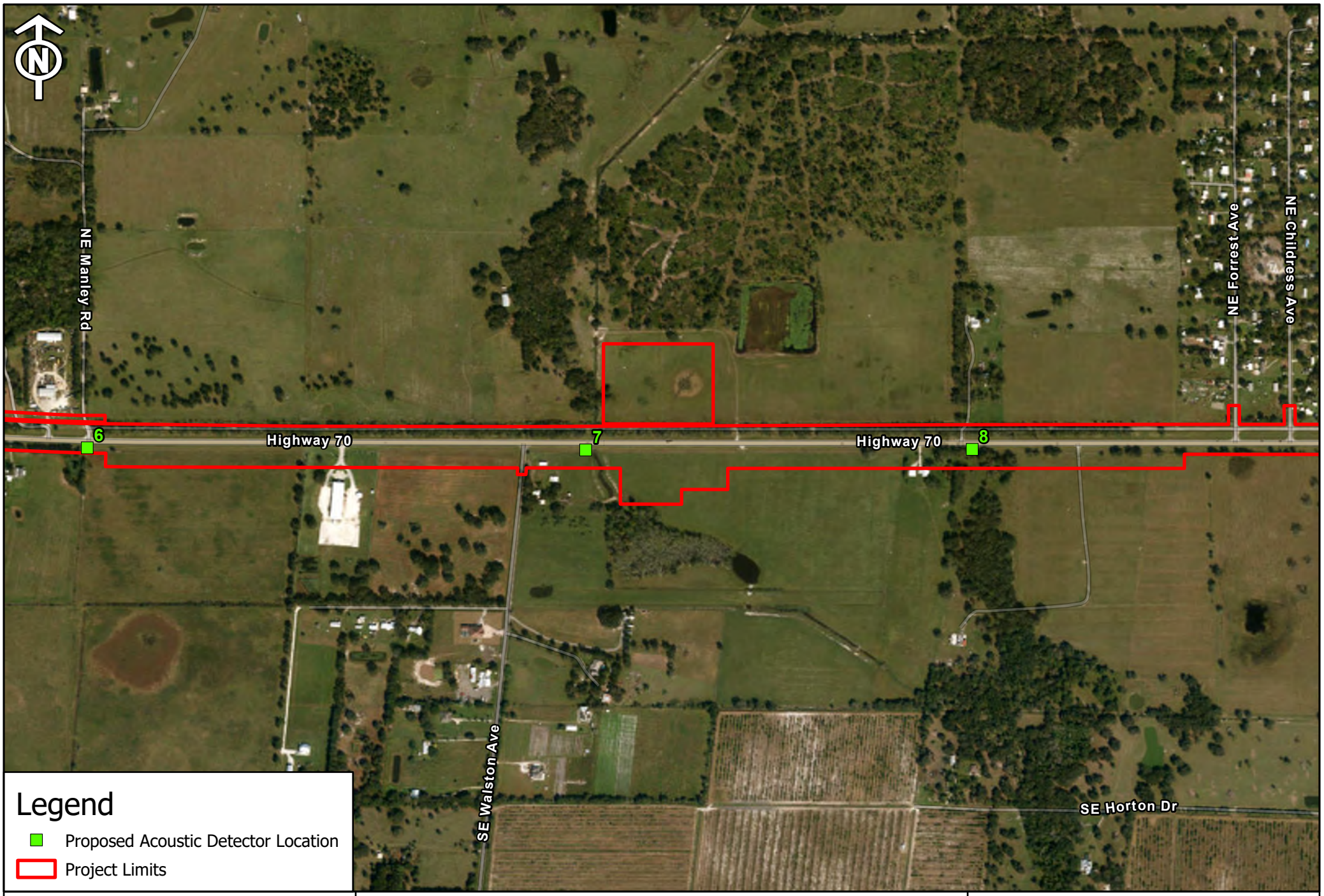
SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-3 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

0 0.3 Miles



SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-4 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

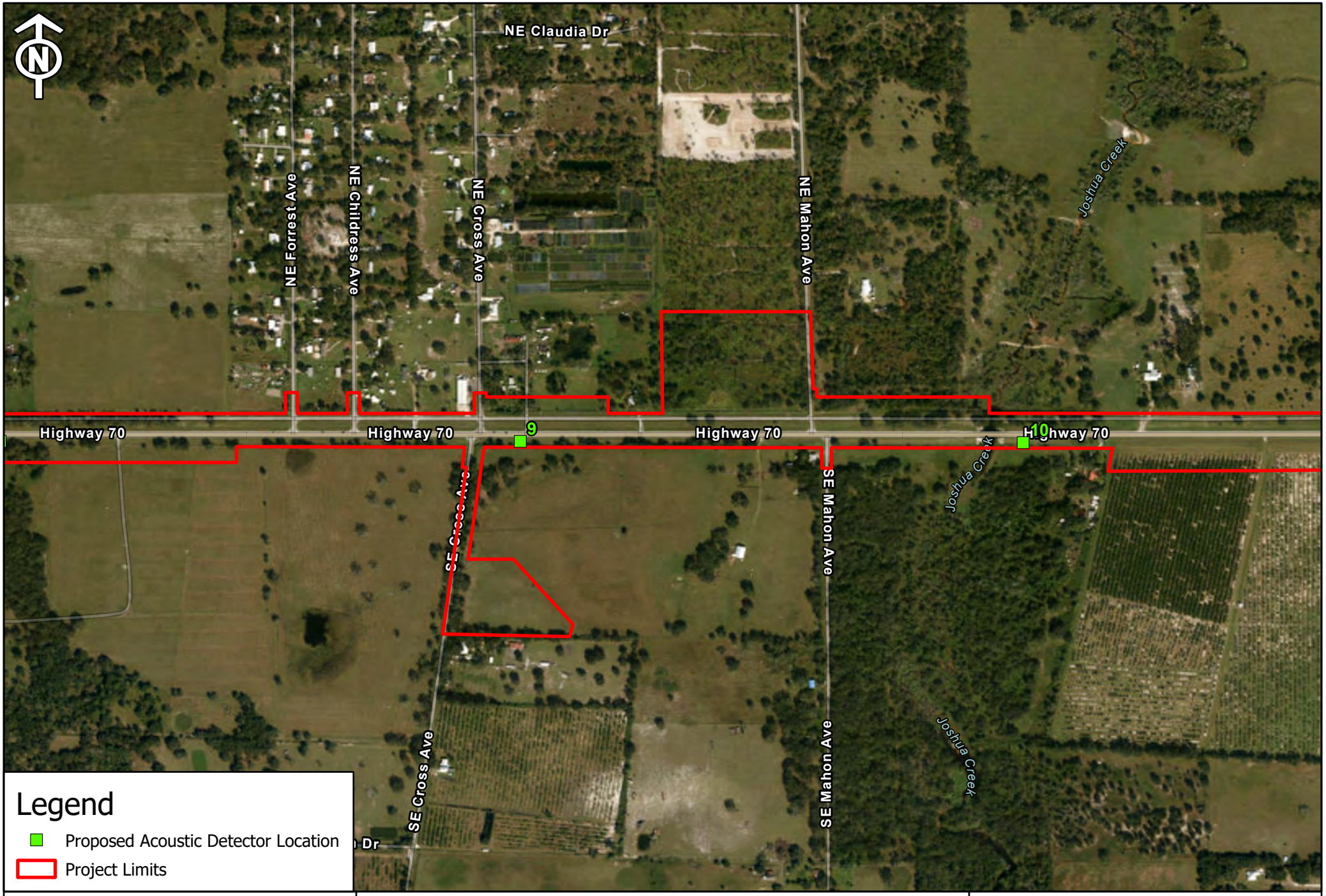
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-5 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

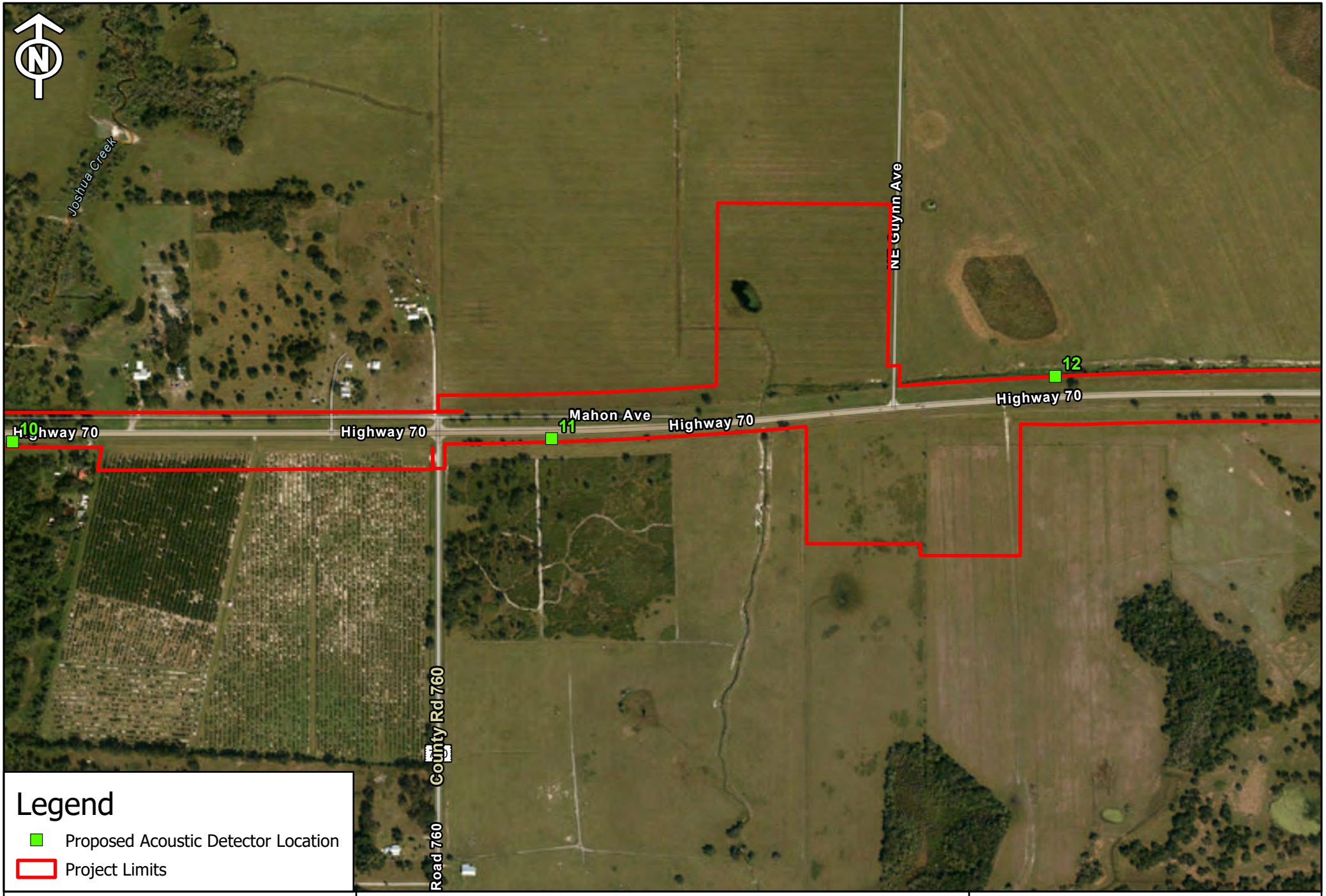
0 0.33 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-6 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

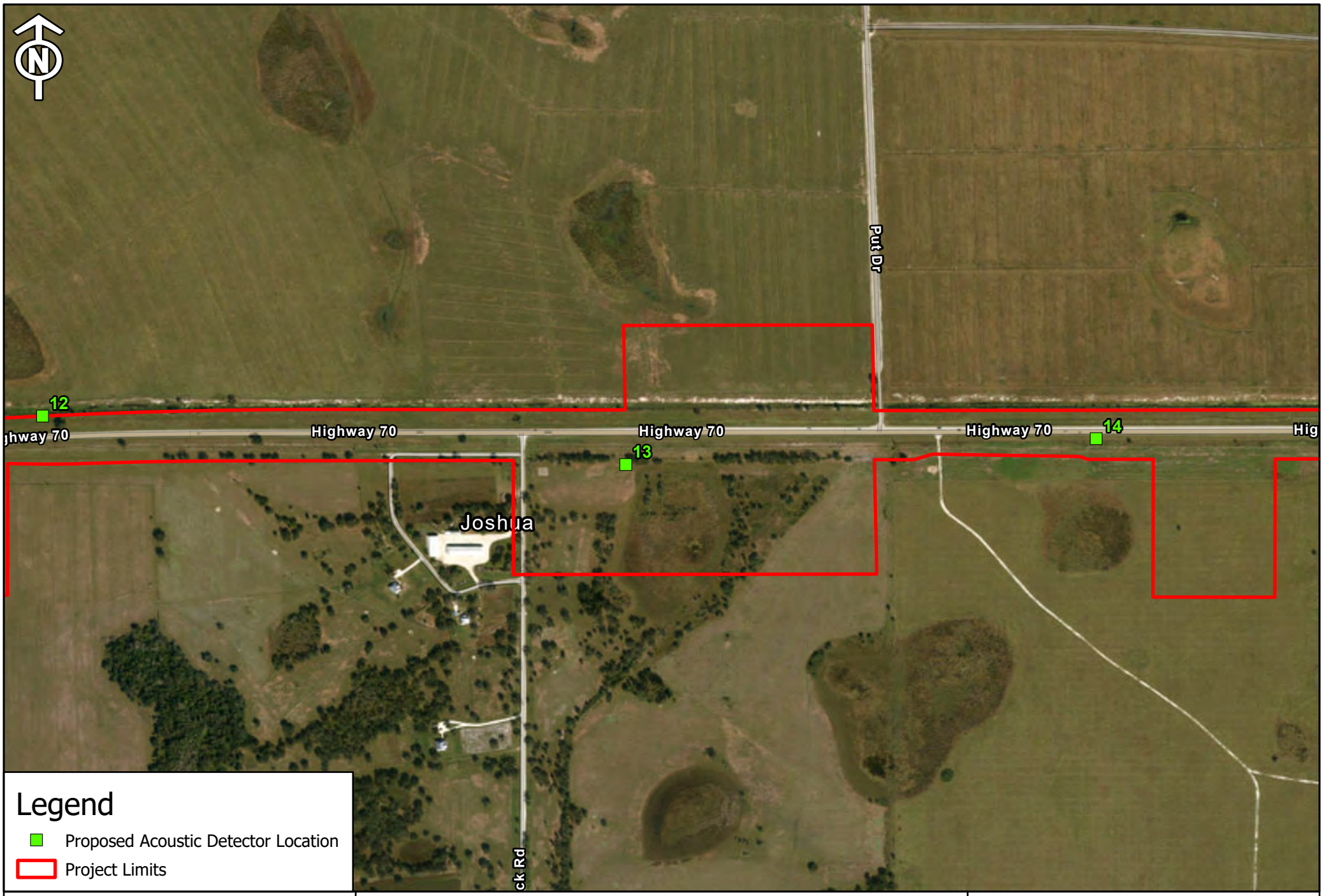
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-7 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

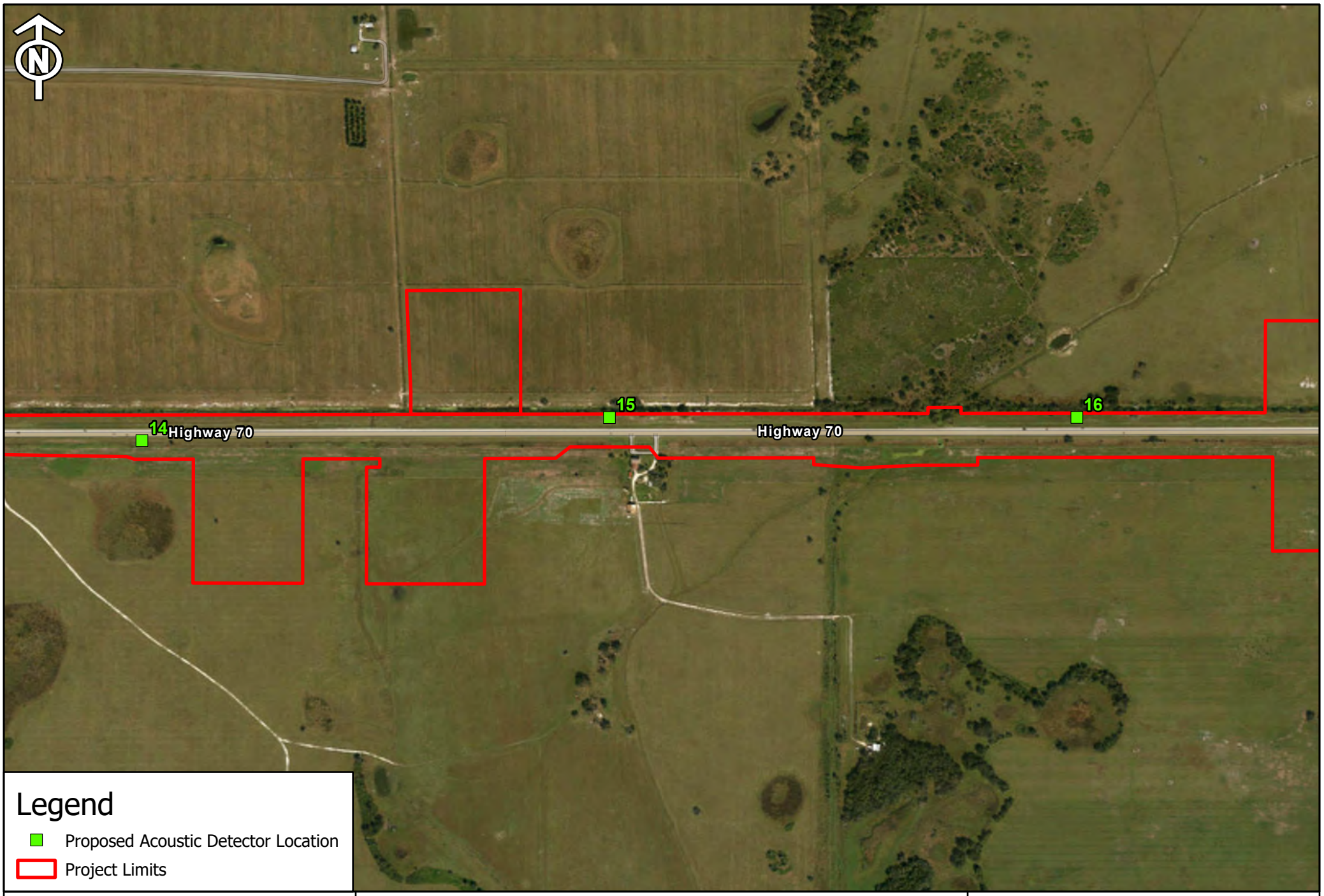
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-8 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

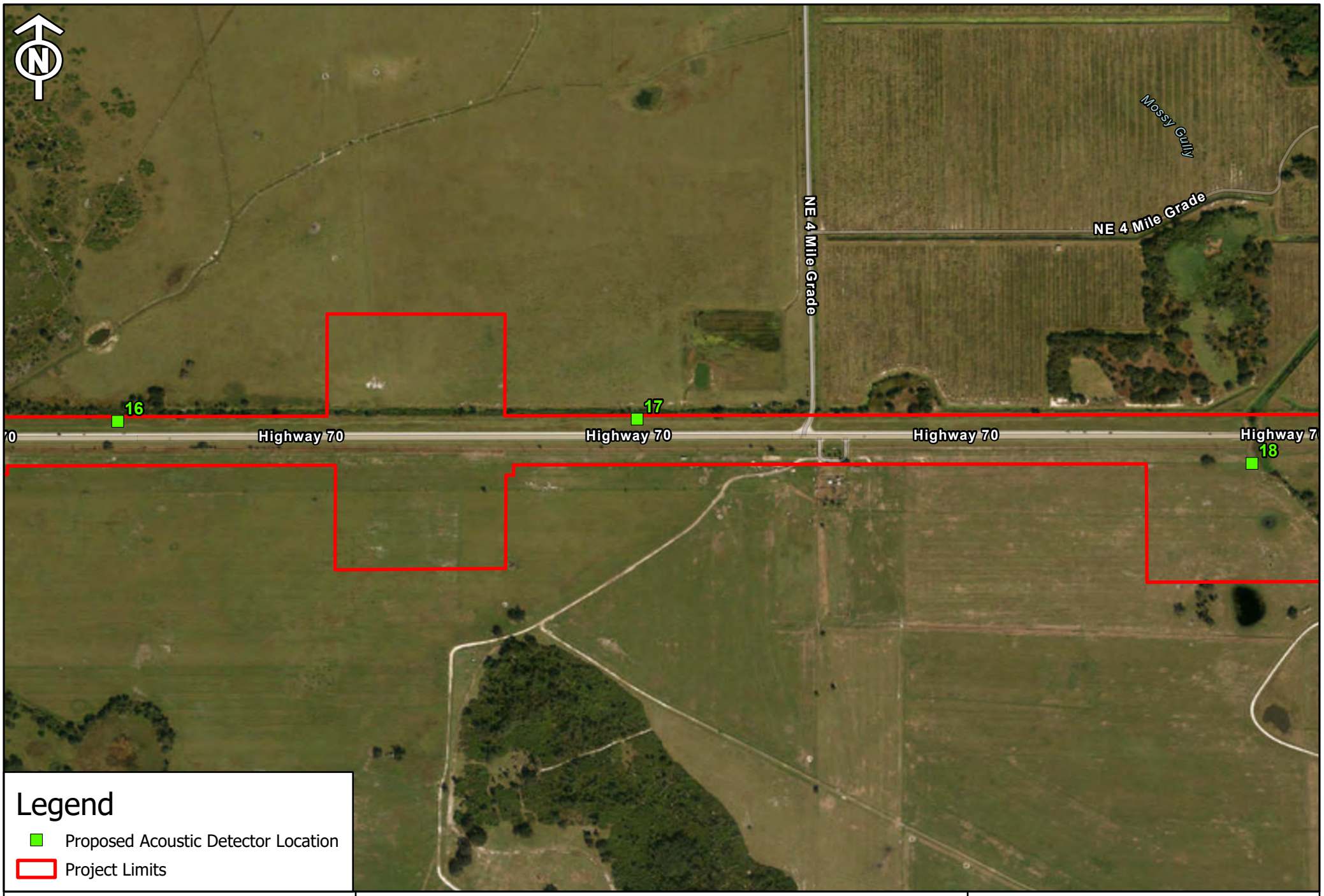
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-9 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

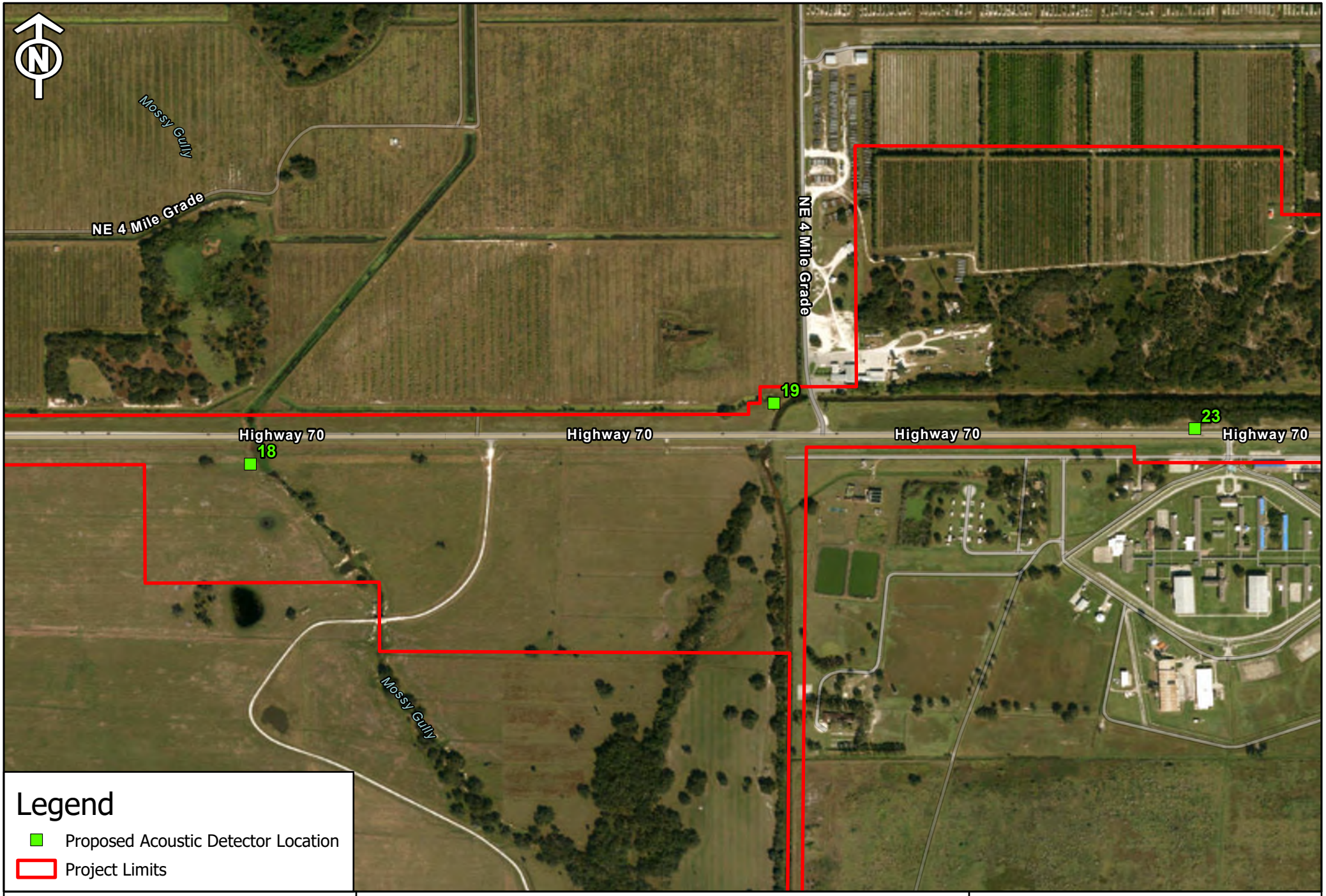
0 0.33 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-10 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

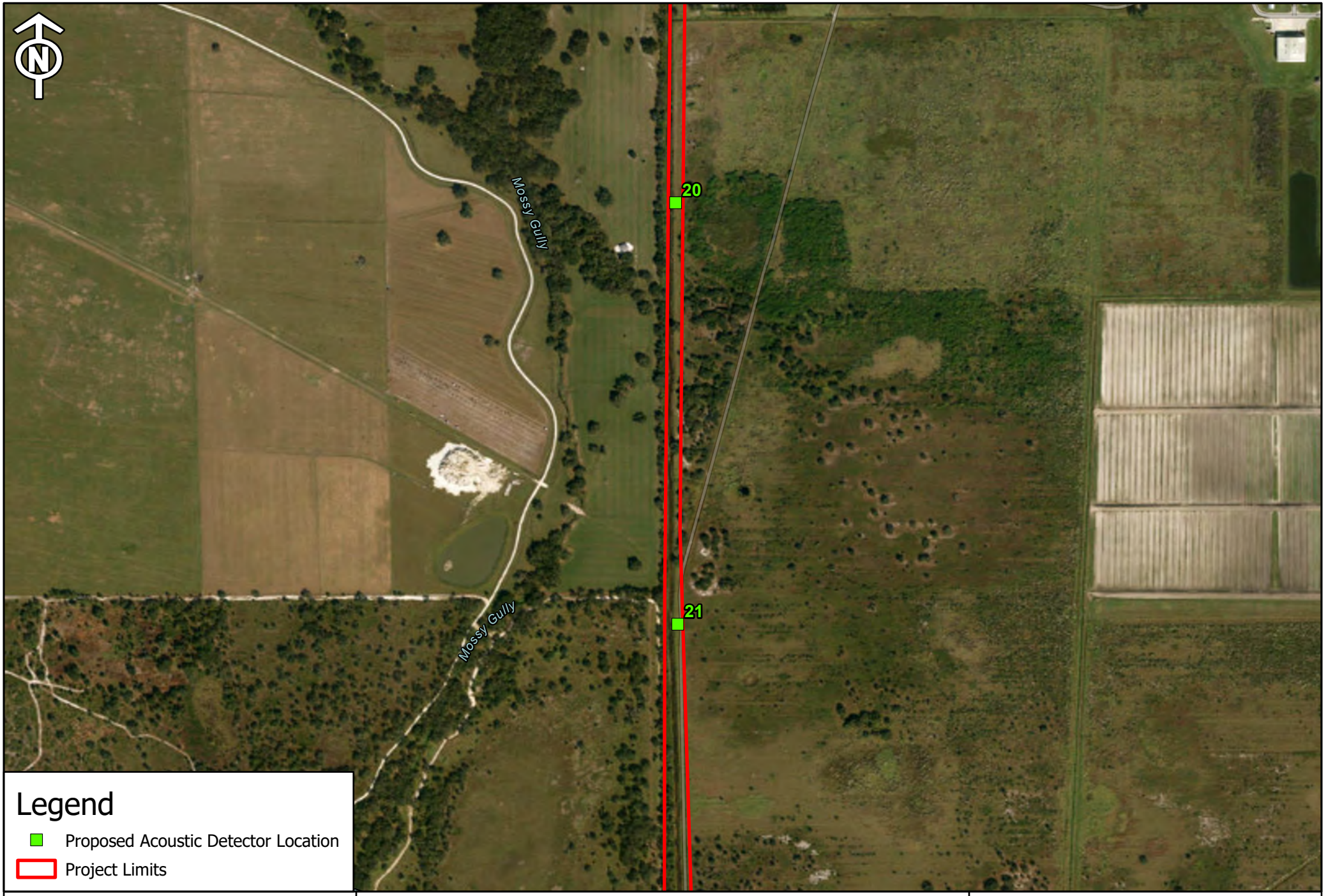
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-11 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

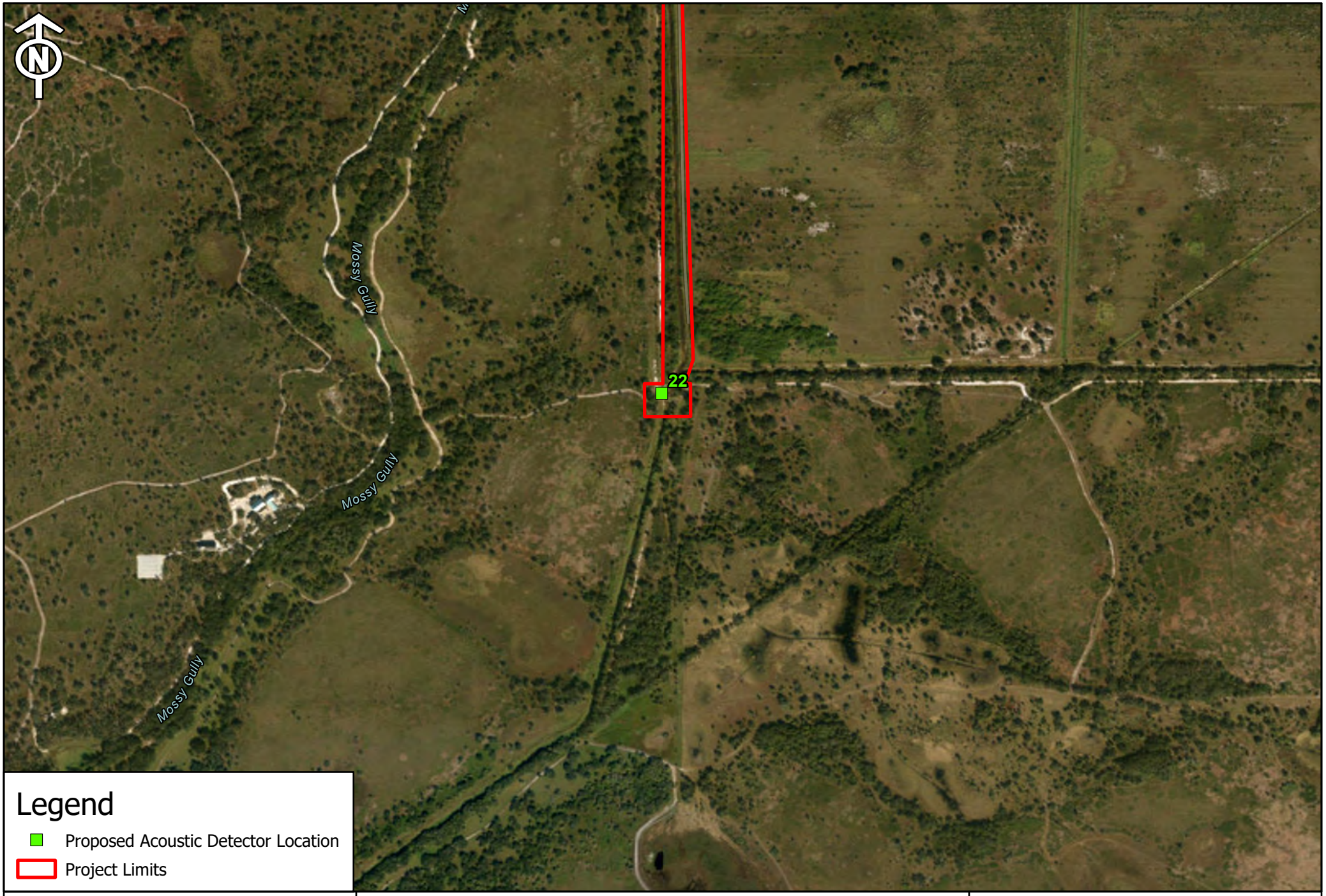
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-12 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

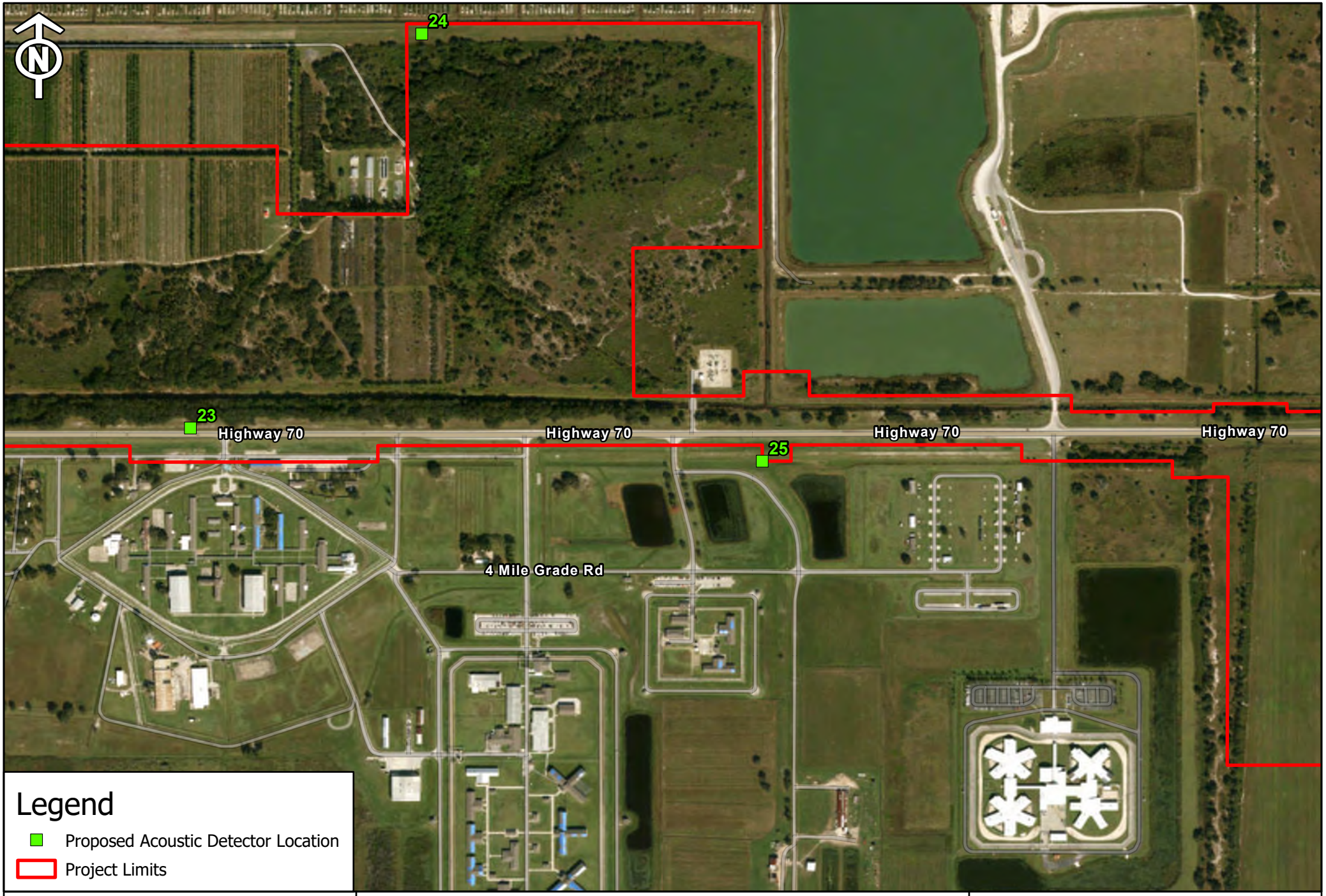
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-13 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

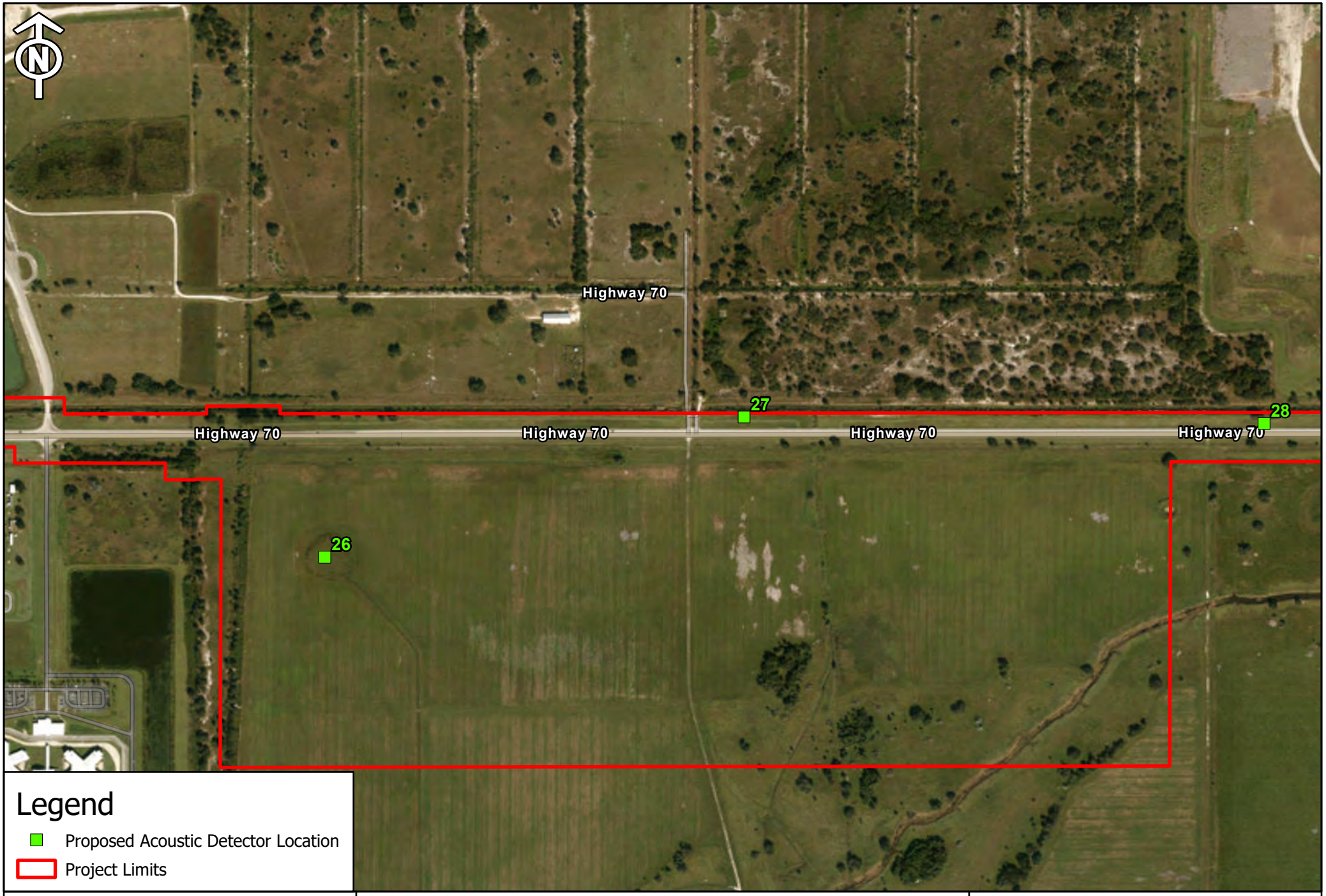
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-14 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

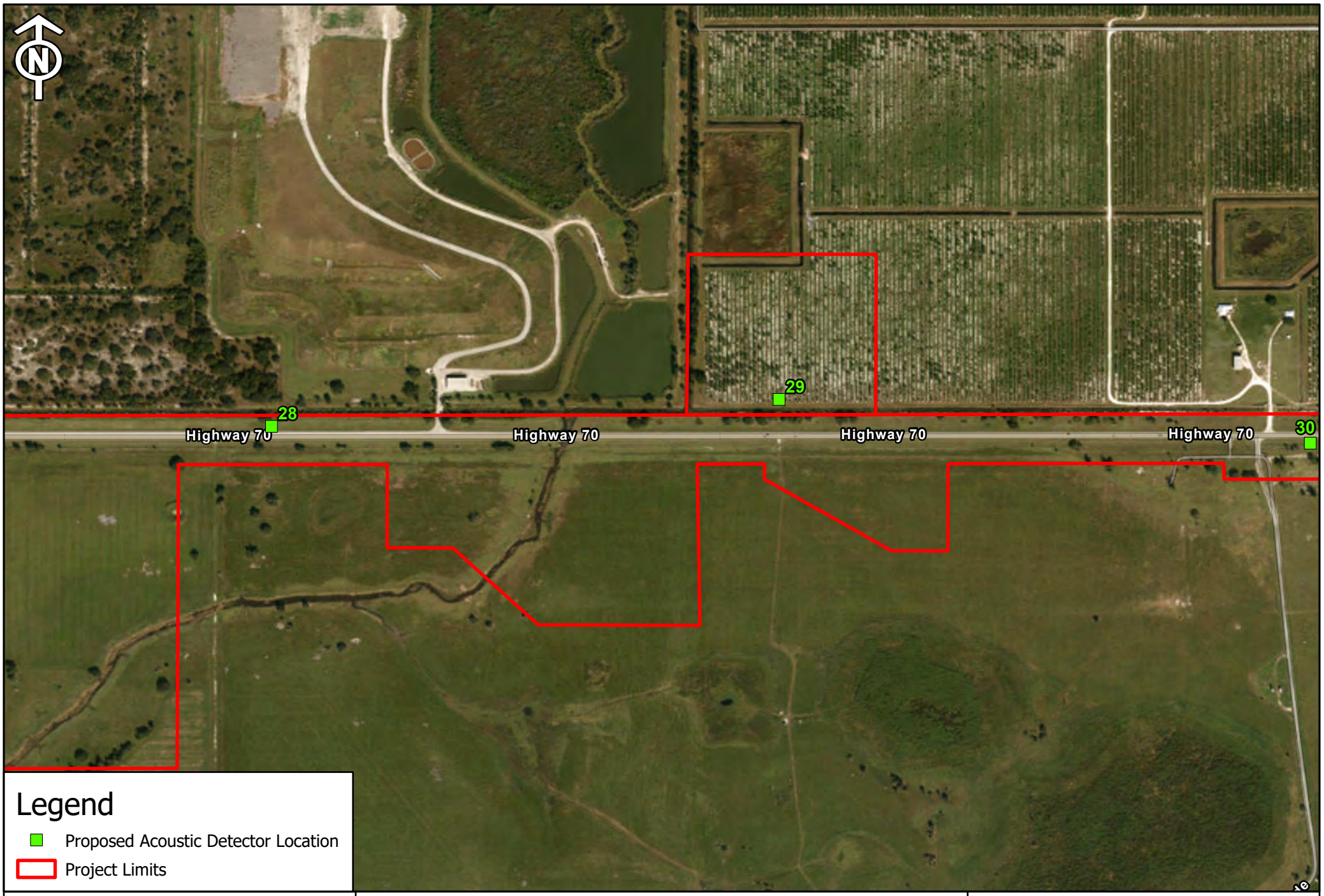
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-15 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

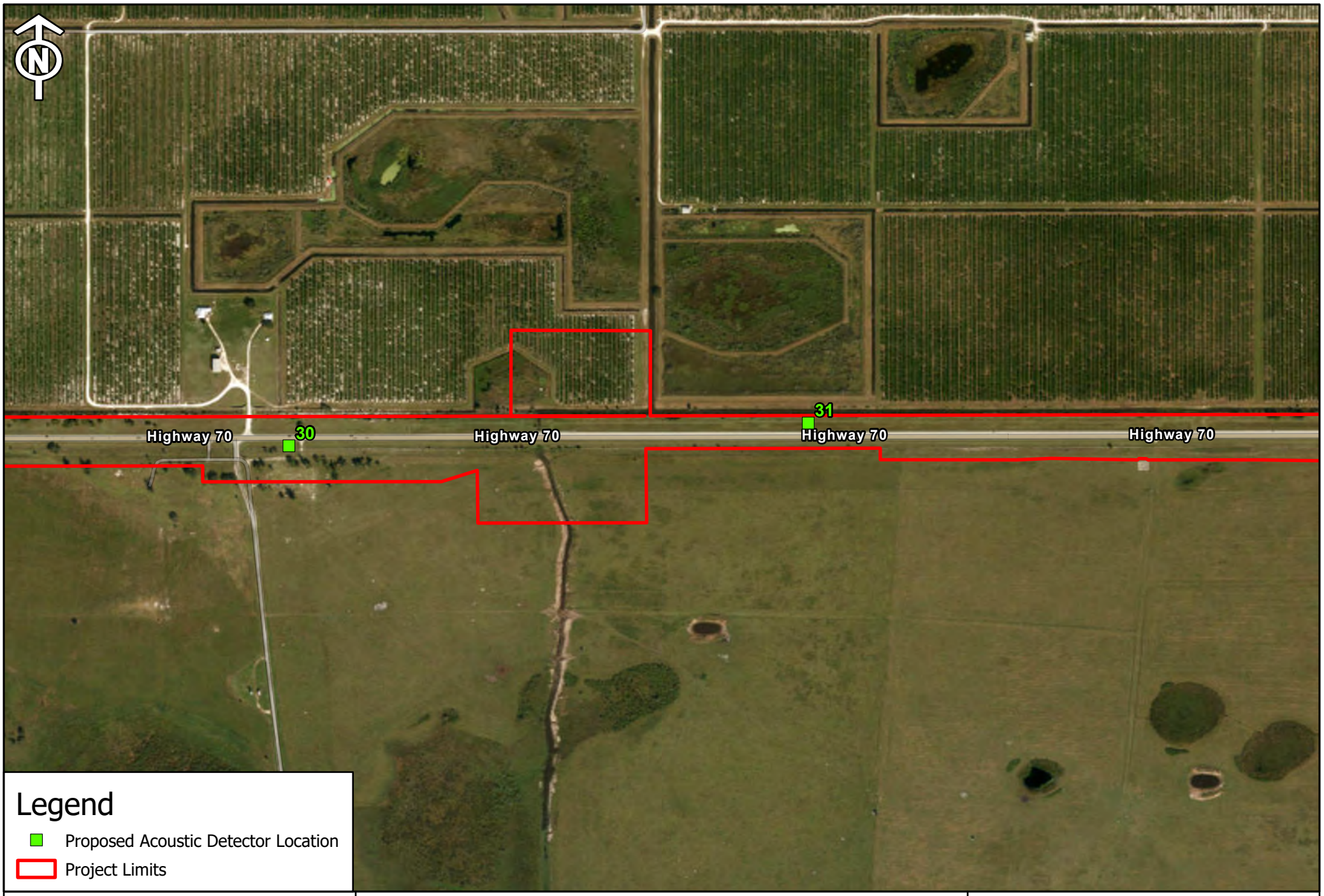
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-16 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

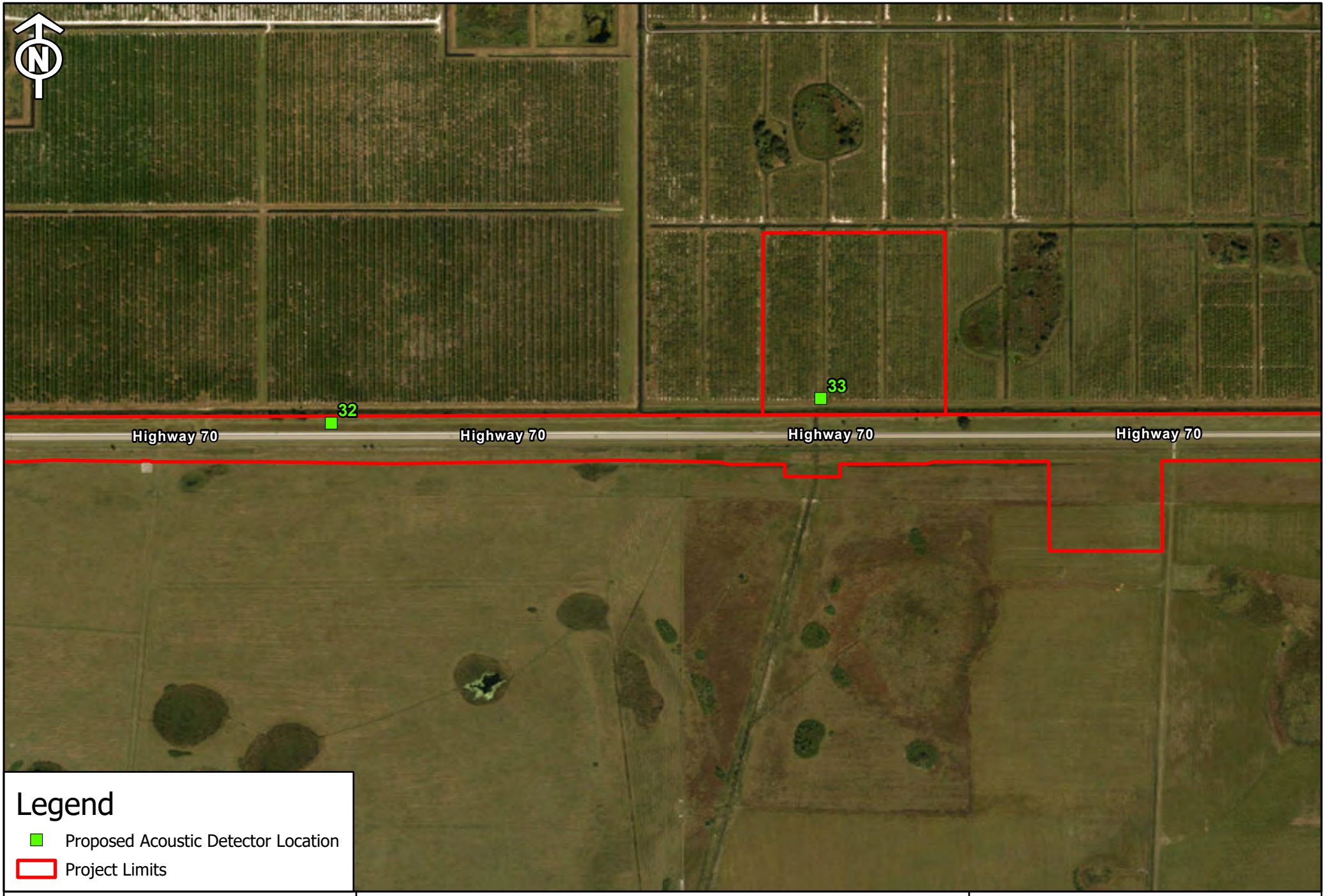
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-17 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

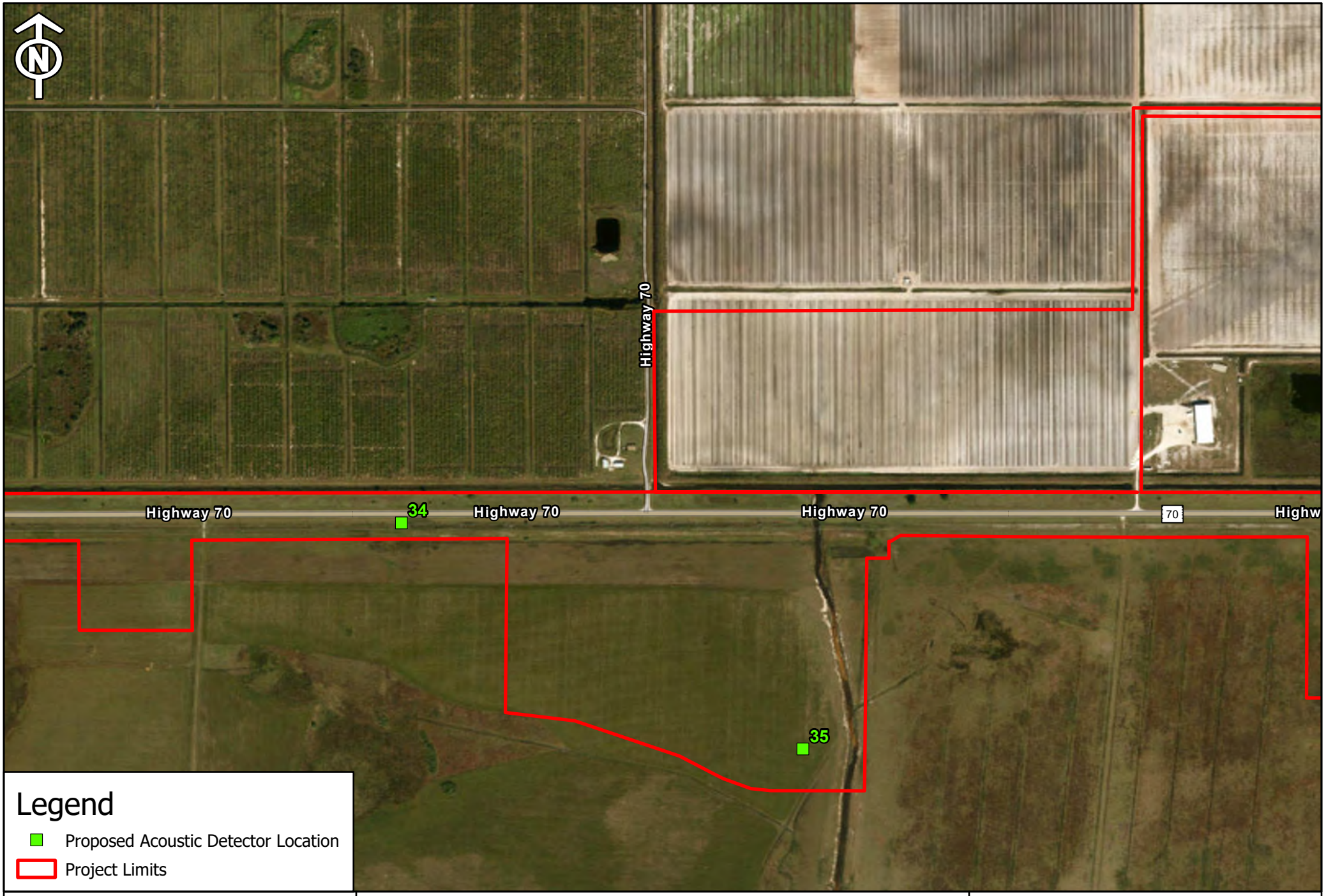
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-18 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

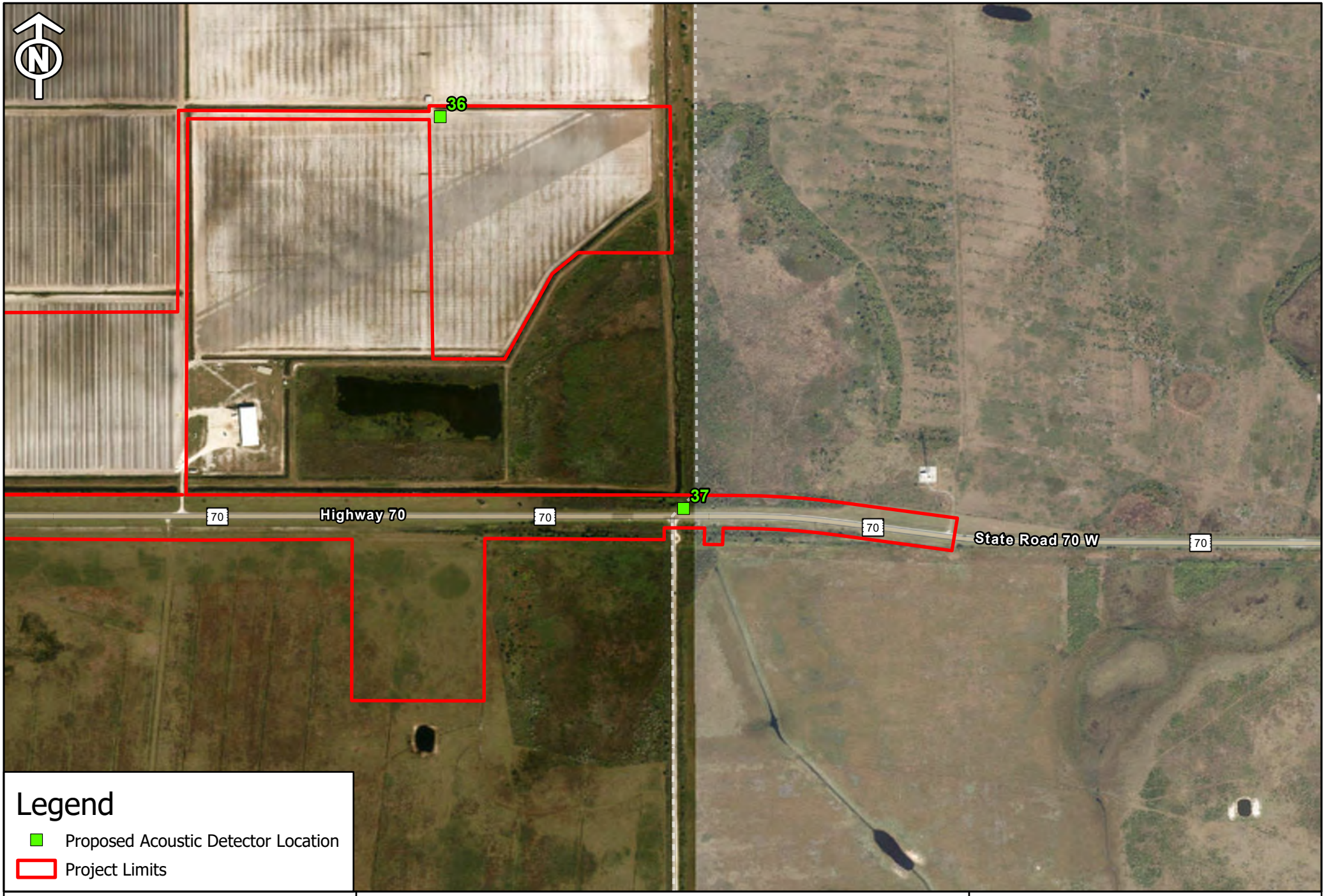
0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-19 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

0 0.3 Miles



FDOT

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
Figure 2-20 - Florida Bonneted Bat and Tricolored Bat
Acoustic Survey Detector Location Map

0 0.3 Miles

Appendix B

Representative Photographs of Acoustic Survey Stations

Survey Station No. 1

Survey Station No. 1 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 1 – Facing East

Survey Station No. 1 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 1 – Facing West

Survey Station No. 2

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 2 – Facing North

Survey Station No. 2 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 2 – Facing South

Survey Station No. 2 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 3

Survey Station No. 3 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 3 – Facing East

Survey Station No. 3 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 3 – Facing West

Survey Station No. 4

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 4 – Facing North

Survey Station No. 4 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 4 – Facing South

Survey Station No. 4 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 5

Survey Station No. 5 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 5 – Facing East

Survey Station No. 5 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 5 – Facing West

Survey Station No. 6

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 6 – Facing North

Survey Station No. 6 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 6 – Facing South

Survey Station No. 6 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 7

Survey Station No. 7 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 7 – Facing East

Survey Station No. 7 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 7 – Facing West

Survey Station No. 8

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 8 – Facing North

Survey Station No. 8 – Facing East

Survey Station No. 8 – Facing South

Survey Station No. 8 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 9

Survey Station No. 9 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 9 – Facing East

Survey Station No. 9 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 9 – Facing West

Survey Station No. 10

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 10 – Facing North

Survey Station No. 10 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 10 – Facing South

Survey Station No. 10 – Facing West

Survey Station No. 11

Survey Station No. 11 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 11 – Facing East

Survey Station No. 11 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 11 – Facing West

Survey Station No. 12

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 12 – Facing North

Survey Station No. 12 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 12 – Facing South

Survey Station No. 12 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 13

Survey Station No. 13 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 13 – Facing East

Survey Station No. 13 – Facing South

Survey Station No. 13 – Facing West

Survey Station No. 14

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 14 – Facing North

Survey Station No. 14 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 14 – Facing South

Survey Station No. 14 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 15

Survey Station No. 15 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 15 – Facing East

Survey Station No. 15 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 15 – Facing West

Survey Station No. 16

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 16 – Facing North

Survey Station No. 16 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 16 – Facing South

Survey Station No. 16 – Facing West

Survey Station No. 17

Survey Station No. 17 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 17 – Facing East

Survey Station No. 17 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 17 – Facing West

Survey Station No. 18

Survey Station No. 18 – Facing North

Survey Station No. 18 – Facing East

Survey Station No. 18 – Facing South

Survey Station No. 18 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 19

Survey Station No. 19 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 19 – Facing East

Survey Station No. 19 – Facing South

Survey Station No. 19 – Facing West

Survey Station No. 20

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 20 – Facing North

Survey Station No. 20 – Facing East

Survey Station No. 20 – Facing South

Survey Station No. 20 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 21

Survey Station No. 21 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 21 – Facing East

Survey Station No. 21 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 21 – Facing West

Survey Station No. 22

Survey Station No. 22 – Facing North

Survey Station No. 22 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 22 – Facing South

Survey Station No. 22 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 23

Survey Station No. 23 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 23 – Facing East

Survey Station No. 23 – Facing South

Survey Station No. 23 – Facing West

Survey Station No. 24

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 24 – Facing North

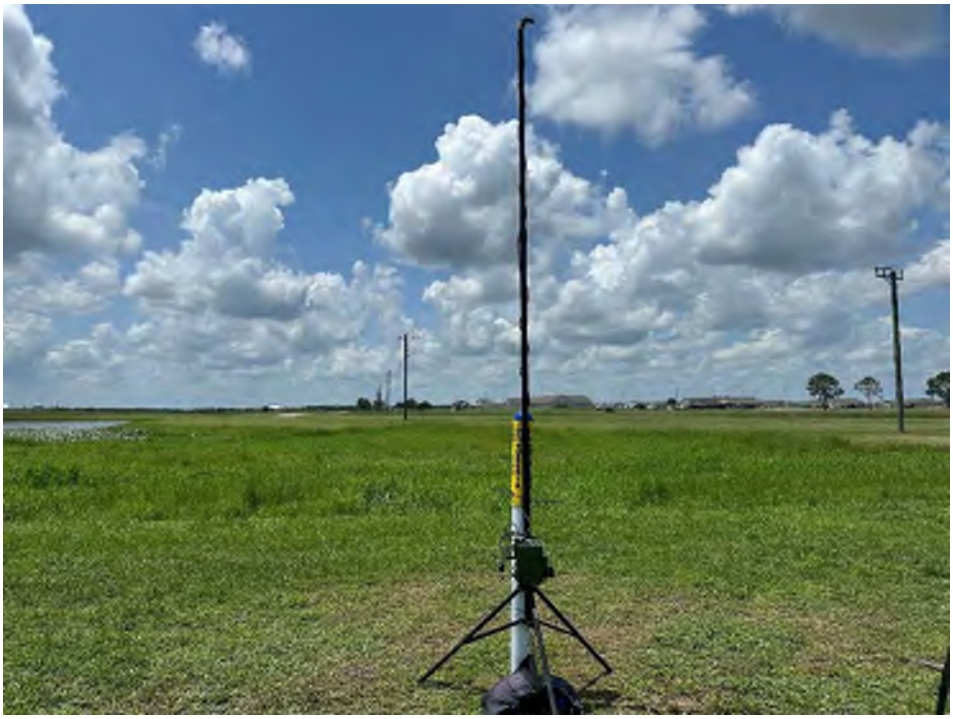
Survey Station No. 24 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 24 – Facing South

Survey Station No. 24 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations



Survey Station No. 25

Survey Station No. 25 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 25 – Facing East

Survey Station No. 25 – Facing South

Survey Station No. 25 – Facing West

Survey Station No. 26

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 26 – Facing North

Survey Station No. 26 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 26 – Facing South

Survey Station No. 26 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 27

Survey Station No. 27 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 27 – Facing East

Survey Station No. 27 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 27 – Facing West

Survey Station No. 28

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 28 – Facing North

Survey Station No. 28 – Facing East

Survey Station No. 28 – Facing South

Survey Station No. 28 – Facing West

Survey Station No. 29

Survey Station No. 29 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 29 – Facing East

Survey Station No. 29 – Facing South

Survey Station No. 29 – Facing West

Survey Station No. 30

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 30 – Facing North

Survey Station No. 30 – Facing East

Survey Station No. 30 – Facing South

Survey Station No. 30 – Facing West

Survey Station No. 31

Survey Station No. 31 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 31 – Facing East

Survey Station No. 31 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 31 – Facing West

Survey Station No. 32

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 32 – Facing North

Survey Station No. 32 – Facing East

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 32 – Facing South

Survey Station No. 32 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 33

Survey Station No. 33 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 33 – Facing East

Survey Station No. 33 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 33 – Facing West

Survey Station No. 34

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 34 – Facing North

Survey Station No. 34 – Facing East

Survey Station No. 34 – Facing South

Survey Station No. 34 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 35

Survey Station No. 35 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 35 – Facing East

Survey Station No. 35 – Facing South

Survey Station No. 35 – Facing West

Survey Station No. 36

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 36 – Facing North

Survey Station No. 36 – Facing East

Survey Station No. 36 – Facing South

Survey Station No. 36 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 37

Survey Station No. 37 – Facing North

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 37 – Facing East

Survey Station No. 37 – Facing South

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Survey Station No. 37 – Facing West

SR 70 from West of SR 31 to SE Highlands County Line Road FPID No. 451942-1-22-01	**Appendix B** Representative Photographs of Acoustic Survey Stations

Appendix C

Acoustic Detector Deployment Data Sheets

EXAMPLE DATA SHEET FOR ACOUSTIC DETECTOR DEPLOYMENTS

Date(s):	5/30/25
Project:	SR 70 from SR 31 to Highlands Ck Rd
Site & GRTS ID:	
Name(s):	Alexandra Hipolito, Victoria Scriven

ACOUSTIC DETECTOR DEPLOYMENTS

Location Name	Station 8-9	Station 9-9	Station 10-9		
Latitude	27.208°N	27.208°N	27.208°N		
Longitude	81.774°W	81.766°W	81.758°W		
Survey Start TIme	5/30/25	5/30/25	5/30/25		
Survey End TIme	6/12/25	6/12/25	6/12/25		
Detector Type	SM4BATFS	SM4BATFS	SM4BATFS		
Detector Serial Number	S4U18768	S4U01349	S4U08529		
Microphone Model	SMM-U2 MU210969	SMM-U2 MU201864	MU211568		
Microphone Orientation	Vertical	Vertical	Vertical		
Microphone Height	10ft	10ft	10ft		
Distance Nearest Clutter (m)	20ft	5ft	<20ft		
Clutter Type	trees(oaks)	shrub	none		
Broad Habitat Type	agriculture roadway	agriculture roadway	roadway		
Land Unit Code	DESO	DESO	DESO		
Contact Information					
Deployment Comments					

EXAMPLE DATA SHEET FOR **ACOUSTIC DETECTOR DEPLOYMENTS**

Date(s):	5/30/25
Project:	SR 70 Tumbr 31 to Highlands Ct Rd
Site & GRTS ID:	
Name(s):	Alexandra Hipolito, Victoria Scriven

ACOUSTIC DETECTOR DEPLOYMENTS

Location Name		Station 7-9			
Latitude		27.208°N			
Longitude		81.782°W			
Survey Start TIme		5/30/25			
Survey End TIme		6/12/25			
Detector Type		SM4BAT FS			
Detector Serial Number		84U08510			
Microphone Model		SMM-U2 MU211569			
Microphone Orientation		vertical			
Microphone Height		10ft			
Distance Nearest Clutter (m)		<20ft			
Clutter Type		veg			
Broad Habitat Type		agriculture roadway			
Land Unit Code		DFSD ~~Urban~~			
Contact Information					
Deployment Comments					

EXAMPLE DATA SHEET FOR **ACOUSTIC DETECTOR DEPLOYMENTS**

Date(s):	5/30/25	
Project:	SR 70 from SR 31 to Highlands Cnty	
Site & GRTS ID:		
Name(s):	Alexandra Hipolito, Victoria Salven	
ACOUSTIC DETECTOR DEPLOYMENTS		
Location Name	Station 1-9	Station 2-9
Latitude	27.208°N	27.210°N
Longitude	81.836°W	81.828°W
Survey Start TIme	5/30/25	5/30/25
Survey End TIme	6/12/25	6/12/25
Detector Type	SM4BAT FS	SM4BAT FS
Detector Serial Number	S4U25961	
Microphone Model	SMM-U2 MU206815	SMM-U2 MU206813
Microphone Orientation	Vertical	Vertical
Microphone Height	10 ft	10 ft
Distance Nearest Clutter (m)	<20 ft	<20 ft
Clutter Type	landscaping veg	landscaping veg
Broad Habitat Type	Roadway urban	roadway urban
Land Unit Code	DESO	DESO
Contact Information		
Deployment Comments		

Needed Serial # SM4 BAT FS

EXAMPLE DATA SHEET FOR **ACOUSTIC DETECTOR DEPLOYMENTS**

Date(s):	6/2/25				
Project:	SR 70 from W of SR 31 to Highlands Ct Rd				
Site & GRTS ID:					
Name(s):	Brannon Freeman				
ACOUSTIC DETECTOR DEPLOYMENTS					
Location Name	22-10	21-10	20-10		
Latitude	27.187397 N	27.193876 N	27.200779 N		
Longitude	81.677308 W	81.677529 W	81.677495 W		
Survey Start TIme	6/2/25	6/2/25	6/2/25		
Survey End TIme	6/12/25	6/12/25	6/12/25		
Detector Type	SM4BATFS	SM4BATFS	Chorus		
Detector Serial Number	S4U11419	S4U14558	743514		
Microphone Model	SMM-U2 MU213528	SMM-U2 MU215195	711481		
Microphone Orientation	Vertical	Vertical	Vertical		
Microphone Height	3m	3m	3m		
Distance Nearest Clutter (m)	2m	2m	2m		
Clutter Type	vegetation	vegetation	vegetation		
Broad Habitat Type	shrubland grassland ~~water~~	shrubland grassland ~~water~~	shrubland grassland ~~water~~		
Land Unit Code	DESO	DESO	DESO		
Contact Information					
Deployment Comments					

EXAMPLE DATA SHEET FOR **ACOUSTIC DETECTOR DEPLOYMENTS**

Date(s):	5/29/25				
Project:	SR 70 from WV 83 to SE Highlands Cl. Rd				
Site & GRTS ID:					
Name(s):	Shannon Freeman, Andrea Ramos, Oliver Laczko				
ACOUSTIC DETECTOR DEPLOYMENTS					
Location Name	29-10	28-10	27-10	26-10	25-10
Latitude	27.209363°N	27.209360°N	27.209936°N	27.209359°N	27.209161°N
Longitude	81.027650°W	81.035984°W	81.045376°W	81.051184°W	81.060853°W
Survey Start TIme	5/29/25 →				
Survey End TIme	6/12/25 →				
Detector Type	SM4BATFS	SM4BATFS	SM4BATFS	SM4BATFS	SM4BATFS
Detector Serial Number	S4U03423	S4U25403	S4U25354	S4U11359	S4U13545
Microphone Model	SMM-U2 MU201637	SMM-U2 MU231162	SMM-U2 MU229572	SMM-U2 MU213583	SMM-U2 MU213581
Microphone Orientation	Vertical	Vertical	Vertical	Vertical	Vertical
Microphone Height	3m	3m	3m	3m	3m
Distance Nearest Clutter (m)	50m +	6m	2M	10m +	10m +
Clutter Type	vegetation	vegetation	water	vegetation	veg vegetation
Broad Habitat Type	grassland	grassland	grassland - water	grassland	Wetland - grassland
Land Unit Code	DESD	DESO	DESO	DESO	DESO
Contact Information					
Deployment Comments					

EXAMPLE DATA SHEET FOR **ACOUSTIC DETECTOR DEPLOYMENTS**

Date(s):	5/29/25				
Project:	SR 70 from W of SR 31 to Highlands CL Rd				
Site & GRTS ID:					
Name(s):	Shannon Freeman, Andrea Ramos, Oliver Lacko				
ACOUSTIC DETECTOR DEPLOYMENTS					
Location Name	24-10	23-10	19-10	18-10	17-10
Latitude	27.216017 N	27.209677 N	27.209571 N	27.209025 N	27.209762 N
Longitude	81.607106 W	81.610907 W	81.617797 W	81.686302 W	81.609759 W
Survey Start TIme	5/29/25 →				→
Survey End TIme	6/12/25 →				→
Detector Type	SM4BATFS	SM4BATFS	SM4BATFS	SM4BATFS	SM4BATFS
Detector Serial Number	S4U05538	S4U14559	S4U18770	S4U23921	S4U10076
Microphone Model	SMM-U2 MU228659	SMM-U2 MU215369	SMM-U2 MU231275	SMM-U2 MU231177	SMM-U2 MU231280
Microphone Orientation	vertical	vertical	vertical	vertical	vertical
Microphone Height	3m	3m	3m	3m	3m
Distance Nearest Clutter (m)	2m	5m	2m	2m	5m
Clutter Type	vegetation	vegetation	veg/water	veg/water	veg
Broad Habitat Type	grassland - forested deciduous	forested dec.	water - grassland	water/grassland	grassland
Land Unit Code	DESO	DESO	DESO	DESO	DESO
Contact Information					
Deployment Comments					

EXAMPLE DATA SHEET FOR **ACOUSTIC DETECTOR DEPLOYMENTS**

Date(s):	5/29/25
Project:	SR 70 from W of SR 31 to Highlands Cl. Rd
Site & GRTS ID:	
Name(s):	

ACOUSTIC DETECTOR DEPLOYMENTS

Location Name	16-10	15-10	14-10	13-10	12-10
Latitude	27.209715 N	27.209773 N	27.209754 N	27.208914 N	27.209668 N
Longitude	81.705654 W	81.714586 W	81.723290 W	81.730375 W	81.740404 W
Survey Start TIme	5/29/25	→	→	→	→
Survey End TIme	6/12/25	→	→	→	→
Detector Type	SM4BATFS	SM4BATFS	SM4BATFS	SM4BATFS	SM4BATFS
Detector Serial Number	S4U26169	S4U26228	S4U26229	S4U11515	S4U25886
Microphone Model	SMM-U2 MU230738	SMM-U2 MU230757	SMM-U2 MU230713	SMM-U2 MU229003	SMM-U2 MU226894
Microphone Orientation	Vertical	Vertical	Vertical	Vertical	Vertical
Microphone Height	3m	3m	3m	3m	3m
Distance Nearest Clutter (m)	2m	2m	2m	2m	2m
Clutter Type	Vegetation	Vegetation	Vegetation	Vegetation	Vegetation
Broad Habitat Type	forest wetland	wetland/ grassland	wetland/ grassland	wetland/grass	wetland/ grassland
Land Unit Code	DESO	DESO	DESO	DESO	DESO
Contact Information					
Deployment Comments					

EXAMPLE DATA SHEET FOR **ACOUSTIC DETECTOR DEPLOYMENTS**

Date(s):	5/29/25
Project:	SR 70 from SR 31 to Highlands Ck Rd
Site & GRTS ID:	
Name(s):	Shannon Freeman, Andrea Ramos, Over Lackey

ACOUSTIC DETECTOR DEPLOYMENTS					
Location Name	11-10				
Latitude	27.208619 N				
Longitude	81.749201 W				
Survey Start TIme	5/29/25	—			
Survey End TIme	6/12/25				
Detector Type	SM4BATFS				
Detector Serial Number	# S4U25895				
Microphone Model	SMM-U2 MU231271				
Microphone Orientation	Vertical				
Microphone Height	3m				
Distance Nearest Clutter (m)	5m				
Clutter Type	Vegetation				
Broad Habitat Type	grassland/ shrubland				
Land Unit Code	OES0				
Contact Information					
Deployment Comments					

EXAMPLE DATA SHEET FOR **ACOUSTIC DETECTOR DEPLOYMENTS**

Date(s):	6/16/25
Project:	SR 70 from SR 31 to Highland County Line Rd
Site & GRTS ID:	
Name(s):	Alexandra Hipolito - Shannon Freeman

ACOUSTIC DETECTOR DEPLOYMENTS

Location Name	Station 6-9	Station 5-9	Station 4-9	Station 3-9	
Latitude	27.2085°N	27.2088°N	27.2085°N	27.2086°N	
Longitude	81.7913°W	81.8015°W	81.8104°W	81.8194°W	
Survey Start TIme	6/16/25	6/16/25	6/16/25	6/15/25	
Survey End TIme	6/30/25	6/30/25	6/30/25	6/30/25	
Detector Type	SM4BAT-FS	→	→	→	
Detector Serial Number	S4U01349	S4U14559	S4U03423	S4U14558	
Microphone Model	SMM-U2	→	→	→	
	MU230713	MU230738	MU226894	MU201864	
Microphone Orientation	vertical	vertical	vertical	vertical	
Microphone Height	10 ft	10 ft	10 ft	10 ft	
Distance Nearest Clutter (m)	20 ft	20 ft	>20 ft	>20 ft	
Clutter Type	vegetation	vegetation	vegetation	vegetation	
Broad Habitat Type	agriculture	agriculture	agriculture	agriculture	
Land Unit Code	DESO	DESO	DESO	DESO	
Contact Information					
Deployment Comments					

EXAMPLE DATA SHEET FOR ACOUSTIC DETECTOR DEPLOYMENTS

Date(s):	5/15/25
Project:	SR 70 from Wood St to SR 31 to SE Highlands County line
Site & GRTS ID:	
Name(s):	Shannon Freeman

ACOUSTIC DETECTOR DEPLOYMENTS

Location Name	30-10	31-10	32-10	33-10	34-10
Latitude	27.209433 N	27.209816 N	27.209414 N	27.209684 N	27.209500 N
Longitude	81.618512 W	81.609799 W	81.600918 W	81.592899 W	81.583656 W
Survey Start TIme	5/15/25 →				
Survey End TIme	5/26/25 →				
Detector Type	SM4BATFS	SM4BATFS	SM4BATFS	SM4BATFS	SM4BATFS
Detector Serial Number	S4U23921	S4U11515	S4U11359	S4U11076	S4U18770
Microphone Model	SMM-U2 MU231177	SMM-U2 MU229003	SMM-U2 MU213583	SMM-U2 MU231260	SMM-U2 MU231275
Microphone Orientation	Vertical	Vertical	Vertical	Vertical	Vertical
Microphone Height	3m	3m	3m	3m	3m
Distance Nearest Clutter (m)	20m	15m	50m+	8m	50m+
Clutter Type	vegetation	vegetation	vegetation	water	
Broad Habitat Type	grassland	grassland	grassland	grassland	grassland
Land Unit Code	DES0	DES0	DES0	DES0	DES0
Contact Information					
Deployment Comments					

EXAMPLE DATA SHEET FOR ACOUSTIC DETECTOR DEPLOYMENTS

Date(s):	5/15/25
Project:	SR 70 from W of SR 31 to SE Highlands Ct Rd
Site & GRTS ID:	
Name(s):	Shannon Freeman

ACOUSTIC DETECTOR DEPLOYMENTS

Location Name	35-1D	36-1D	37-1D		
Latitude	27.209470 N	27.212269 N	27.209760 N		
Longitude	81.576573 W	81.566358 W	81.562357 W		
Survey Start TIme	5/15/25 →	→	→		
Survey End TIme	5/26/25 →	→			
Detector Type	SM4BAT FS	SM4BAT FS	SM4BAT FS		
Detector Serial Number	S4V26228	S4V26229	S4V26169		
Microphone Model	SMM-U2 MV230757	SMM-U2 MV230713	SMM-U2 MV230738		
Microphone Orientation	Vertical	Vertical	Vertical		
Microphone Height	3m	3m	3m		
Distance Nearest Clutter (m)	3m	2-3m	2m		
Clutter Type	Water	Water/veg	Vegetation		
Broad Habitat Type	grassland, wetland + water	wetland, water + grassland	forested wetland		
Land Unit Code	DESD	DESD	tlGtt		
Contact Information					
Deployment Comments					

Appendix D

Weather Data

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
First Deployment - Stations 30-37													
	Sunset	8:08 PM											
		7:38 PM	86.7 °F	67.5 °F	54 %	WNW	7.4 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		7:44 PM	86.3 °F	68.0 °F	54 %	WNW	7.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		7:49 PM	86.0 °F	67.3 °F	54 %	West	8.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:57 PM	85.4 °F	67.0 °F	55 %	West	**9.8 mph**	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:00 PM	85.2 °F	67.0 °F	55 %	West	8.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:09 PM	84.7 °F	67.0 °F	56 %	West	6.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:18 PM	84.2 °F	67.0 °F	57 %	West	6.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:21 PM	84.1 °F	67.0 °F	57 %	West	4.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:26 PM	83.8 °F	67.0 °F	58 %	West	3.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:34 PM	83.3 °F	67.0 °F	59 %	West	3.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:36 PM	83.1 °F	67.0 °F	59 %	WSW	4.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:40 PM	82.8 °F	67.0 °F	60 %	West	4.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:49 PM	82.6 °F	67.0 °F	60 %	WSW	2.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:52 PM	82.4 °F	67.0 °F	60 %	WSW	2.3 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:59 PM	81.9 °F	68.0 °F	62 %	WSW	0.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:04 PM	81.6 °F	67.0 °F	62 %	WSW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:09 PM	81.5 °F	67.3 °F	62 %	SW	0.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:14 PM	80.6 °F	67.8 °F	65 %	South	4.7 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:17 PM	79.8 °F	68.0 °F	67 %	South	4.9 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:23 PM	79.5 °F	67.7 °F	67 %	SSW	5.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:29 PM	79.6 °F	68.0 °F	67 %	SSW	2.9 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:30 PM	79.0 °F	68.0 °F	68 %	SW	2.4 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:38 PM	79.4 °F	67.0 °F	66 %	WSW	3.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:45 PM	79.6 °F	67.0 °F	66 %	West	3.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		9:53 PM	79.6 °F	67.0 °F	65 %	WNW	4.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		9:59 PM	79.4 °F	67.0 °F	65 %	West	3.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:03 PM	79.3 °F	67.0 °F	65 %	West	3.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:09 PM	79.3 °F	67.0 °F	66 %	West	3.4 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:10 PM	79.2 °F	67.0 °F	66 %	West	3.2 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:19 PM	78.7 °F	67.0 °F	67 %	West	2.9 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:21 PM	78.7 °F	67.0 °F	67 %	West	2.3 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:27 PM	78.5 °F	67.0 °F	67 %	West	2.3 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:30 PM	78.5 °F	67.0 °F	67 %	West	2.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:42 PM	78.2 °F	67.0 °F	68 %	WNW	3.2 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:49 PM	78.0 °F	67.0 °F	69 %	WNW	2.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:52 PM	78.0 °F	67.0 °F	69 %	WNW	2.7 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:58 PM	77.9 °F	67.0 °F	69 %	WNW	2.9 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:04 PM	77.7 °F	67.0 °F	70 %	NW	2.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:09 PM	77.6 °F	67.0 °F	70 %	WNW	2.6 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:13 PM	77.4 °F	67.0 °F	70 %	WNW	2.7 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:18 PM	77.3 °F	67.0 °F	70 %	WSW	2.5 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:21 PM	77.1 °F	67.0 °F	71 %	WSW	2.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:25 PM	76.1 °F	66.0 °F	72 %	WSW	2.7 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:32 PM	75.5 °F	67.0 °F	74 %	WSW	1.2 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:41 PM	75.0 °F	67.0 °F	75 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:48 PM	74.6 °F	67.0 °F	76 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:53 PM	74.9 °F	67.0 °F	76 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:59 PM	75.7 °F	67.0 °F	75 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		12:03 AM	75.4 °F	67.0 °F	75 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		12:08 AM	74.9 °F	67.0 °F	76 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		12:14 AM	74.8 °F	67.0 °F	77 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		12:18 AM	74.2 °F	67.0 °F	78 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		12:29 AM	73.6 °F	67.0 °F	80 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		12:34 AM	73.6 °F	67.0 °F	80 %	WSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		12:39 AM	73.7 °F	67.0 °F	80 %	WSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:49 AM	72.9 °F	67.0 °F	82 %	WSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:53 AM	72.7 °F	67.0 °F	82 %	WSW	0.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:58 AM	72.5 °F	67.0 °F	83 %	WSW	0.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:03 AM	72.8 °F	67.3 °F	83 %	WSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:07 AM	72.8 °F	67.0 °F	82 %	WSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
1	5/15/2025-5/16/2025	1:14 AM	72.4 °F	67.0 °F	83 %	WSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in	30-37	Yes
		1:21 AM	72.2 °F	67.0 °F	83 %	WSW	1.6 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:31 AM	72.1 °F	67.0 °F	83 %	WSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:39 AM	72.1 °F	66.5 °F	83 %	WSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:44 AM	72.2 °F	66.0 °F	82 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:48 AM	72.1 °F	66.0 °F	82 %	SSE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:54 AM	71.9 °F	67.0 °F	83 %	SSE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:58 AM	71.8 °F	66.0 °F	82 %	SSE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:04 AM	71.8 °F	66.0 °F	83 %	SSE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:09 AM	71.6 °F	66.0 °F	83 %	SSE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:19 AM	70.6 °F	66.0 °F	85 %	SSE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:25 AM	70.0 °F	66.0 °F	86 %	SSE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:33 AM	70.1 °F	66.0 °F	86 %	SSE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:39 AM	69.7 °F	66.0 °F	87 %	SSE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:43 AM	69.8 °F	66.0 °F	87 %	SSE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:48 AM	69.9 °F	66.0 °F	87 %	SSE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:53 AM	69.6 °F	66.0 °F	87 %	SSE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:59 AM	69.5 °F	65.8 °F	88 %	SSE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:03 AM	69.9 °F	66.0 °F	88 %	North	2.7 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:10 AM	71.0 °F	67.0 °F	86 %	NNW	2.3 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:17 AM	70.3 °F	66.0 °F	86 %	NNW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:24 AM	69.9 °F	66.0 °F	87 %	NNW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:29 AM	69.7 °F	65.7 °F	87 %	NNW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:39 AM	68.6 °F	65.0 °F	88 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:44 AM	68.4 °F	65.0 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:49 AM	68.8 °F	65.7 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:58 AM	68.7 °F	65.0 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:02 AM	68.7 °F	65.0 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:08 AM	68.6 °F	65.0 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:19 AM	68.6 °F	66.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:29 AM	68.6 °F	66.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:34 AM	68.8 °F	66.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:38 AM	68.7 °F	65.0 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:43 AM	68.8 °F	65.5 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:48 AM	68.8 °F	65.5 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:53 AM	68.8 °F	66.0 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:58 AM	68.7 °F	65.3 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:02 AM	68.4 °F	65.5 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:07 AM	68.4 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:12 AM	68.3 °F	65.0 °F	89 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:19 AM	68.2 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:23 AM	68.0 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:27 AM	68.1 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:34 AM	68.1 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:39 AM	68.1 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:44 AM	67.9 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:48 AM	67.9 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:53 AM	67.7 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:57 AM	67.4 °F	65.0 °F	90 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:03 AM	67.3 °F	65.0 °F	91 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:09 AM	67.2 °F	65.0 °F	91 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:14 AM	67.2 °F	65.0 °F	91 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:16 AM	67.2 °F	65.0 °F	91 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:21 AM	66.9 °F	64.0 °F	91 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:26 AM	66.8 °F	64.0 °F	91 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:39 AM	66.6 °F	64.0 °F	92 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:44 AM	66.6 °F	64.0 °F	92 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:45 AM	66.5 °F	64.0 °F	92 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:58 AM	66.8 °F	65.0 °F	92 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:04 AM	67.1 °F	65.0 °F	92 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:09 AM	66.9 °F	64.0 °F	91 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
	Sunrise	6:38 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:09 PM											
2	5/16/2025-5/17/2025	7:39 PM	87.6 °F	71.0 °F	59 %	WNW	**9.1 mph**	0.0 mph	29.96 in	0.00 in	0.00 in	30-37	Yes
		7:46 PM	87.0 °F	71.0 °F	59 %	West	**10.3 mph**	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:54 PM	86.7 °F	71.0 °F	60 %	West	**10.3 mph**	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:56 PM	86.4 °F	71.0 °F	60 %	West	**9.5 mph**	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:03 PM	86.0 °F	71.0 °F	61 %	West	**9.6 mph**	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:06 PM	85.7 °F	71.0 °F	62 %	West	8.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:13 PM	85.4 °F	71.0 °F	62 %	WNW	6.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:17 PM	85.1 °F	71.0 °F	63 %	WNW	6.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:24 PM	84.8 °F	71.0 °F	63 %	WNW	6.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:34 PM	84.4 °F	71.0 °F	64 %	WNW	6.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:39 PM	84.1 °F	71.0 °F	64 %	WNW	5.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:41 PM	83.9 °F	71.0 °F	65 %	WNW	6.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:48 PM	83.6 °F	71.0 °F	65 %	West	6.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:01 PM	82.9 °F	71.0 °F	67 %	West	5.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:08 PM	82.5 °F	70.0 °F	67 %	West	5.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:14 PM	82.2 °F	71.0 °F	68 %	West	5.4 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:19 PM	82.0 °F	70.5 °F	68 %	West	4.4 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:24 PM	81.8 °F	70.3 °F	68 %	West	4.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:28 PM	81.6 °F	70.8 °F	69 %	West	3.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:35 PM	81.2 °F	71.0 °F	70 %	West	1.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:44 PM	80.6 °F	70.0 °F	71 %	SW	3.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:47 PM	80.2 °F	70.0 °F	71 %	SSW	3.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:51 PM	79.9 °F	70.0 °F	72 %	SSW	2.9 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:59 PM	78.9 °F	70.0 °F	74 %	SSW	0.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		10:04 PM	78.5 °F	70.0 °F	75 %	SSW	1.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:09 PM	78.8 °F	70.0 °F	74 %	SE	3.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:10 PM	78.9 °F	70.0 °F	74 %	SE	3.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:19 PM	78.8 °F	70.0 °F	75 %	SE	0.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:22 PM	78.6 °F	70.0 °F	75 %	SE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:29 PM	78.4 °F	70.0 °F	75 %	SE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:31 PM	77.7 °F	70.0 °F	76 %	SE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:39 PM	77.3 °F	70.0 °F	78 %	SE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:46 PM	77.5 °F	70.0 °F	78 %	SE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		10:59 PM	77.0 °F	70.0 °F	78 %	SE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		11:08 PM	76.6 °F	70.0 °F	79 %	SE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		11:13 PM	76.4 °F	70.0 °F	80 %	SE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		11:19 PM	76.4 °F	70.0 °F	80 %	SE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:24 PM	76.3 °F	70.0 °F	81 %	SE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:29 PM	76.3 °F	70.0 °F	81 %	SE	0.7 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:34 PM	76.5 °F	70.0 °F	80 %	SE	1.7 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:35 PM	76.5 °F	70.0 °F	80 %	SE	1.5 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:43 PM	76.1 °F	70.0 °F	81 %	SE	0.5 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:46 PM	76.1 °F	70.0 °F	81 %	SE	0.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		11:51 PM	76.2 °F	70.0 °F	81 %	NNE	1.5 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		12:08 AM	76.6 °F	70.0 °F	80 %	NNW	2.2 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		12:12 AM	76.8 °F	70.0 °F	79 %	NNW	2.4 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:17 AM	77.0 °F	70.0 °F	79 %	NW	2.2 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:21 AM	77.1 °F	70.0 °F	79 %	NW	2.7 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:27 AM	77.2 °F	70.0 °F	79 %	NW	2.9 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:32 AM	77.1 °F	70.0 °F	79 %	WNW	2.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:38 AM	76.9 °F	70.0 °F	79 %	WNW	2.5 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:42 AM	76.9 °F	70.0 °F	79 %	NW	2.3 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:52 AM	76.8 °F	70.0 °F	80 %	NW	1.5 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:55 AM	76.8 °F	70.0 °F	80 %	NW	1.6 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:00 AM	76.6 °F	70.0 °F	80 %	NW	2.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:08 AM	76.3 °F	70.0 °F	81 %	NW	1.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:14 AM	76.2 °F	70.0 °F	81 %	WNW	1.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:16 AM	75.7 °F	70.0 °F	81 %	West	2.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:23 AM	74.3 °F	69.0 °F	83 %	SSW	3.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:28 AM	73.2 °F	69.0 °F	85 %	SSW	2.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:39 AM	73.1 °F	68.3 °F	85 %	SSW	2.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:43 AM	72.7 °F	68.0 °F	86 %	SSW	4.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:51 AM	72.4 °F	68.0 °F	87 %	SW	3.3 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:57 AM	72.2 °F	68.0 °F	87 %	SW	1.7 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:03 AM	72.2 °F	68.0 °F	87 %	SW	2.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:06 AM	72.3 °F	68.0 °F	87 %	SW	2.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:14 AM	72.3 °F	68.0 °F	87 %	SW	2.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:16 AM	72.4 °F	68.0 °F	87 %	SW	1.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:22 AM	72.3 °F	68.0 °F	87 %	SW	0.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:29 AM	71.8 °F	68.0 °F	88 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:30 AM	71.9 °F	68.0 °F	88 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:39 AM	72.1 °F	68.0 °F	88 %	WSW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:44 AM	72.3 °F	69.0 °F	88 %	NW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:45 AM	72.4 °F	69.0 °F	88 %	NW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:51 AM	72.5 °F	69.0 °F	88 %	NW	2.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:59 AM	72.7 °F	69.0 °F	88 %	NW	2.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:00 AM	72.7 °F	69.0 °F	88 %	NW	2.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:10 AM	73.0 °F	69.0 °F	87 %	NW	2.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:19 AM	73.1 °F	69.0 °F	87 %	NW	2.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:29 AM	73.2 °F	69.0 °F	87 %	NW	1.7 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:34 AM	73.1 °F	69.0 °F	87 %	NW	1.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:38 AM	73.1 °F	69.0 °F	87 %	NW	1.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:43 AM	73.3 °F	69.0 °F	87 %	NW	1.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:49 AM	73.3 °F	69.0 °F	87 %	NW	1.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:54 AM	73.2 °F	69.0 °F	87 %	NW	0.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:59 AM	73.1 °F	69.0 °F	87 %	NW	0.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:00 AM	73.0 °F	69.0 °F	87 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:05 AM	72.9 °F	69.0 °F	87 %	NW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:14 AM	72.3 °F	69.0 °F	88 %	NW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:19 AM	71.7 °F	68.0 °F	88 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:23 AM	71.2 °F	68.0 °F	89 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:25 AM	70.9 °F	68.0 °F	89 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:34 AM	71.0 °F	68.0 °F	90 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:36 AM	71.5 °F	68.5 °F	90 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:45 AM	71.2 °F	68.0 °F	89 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:53 AM	70.9 °F	68.0 °F	89 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:56 AM	70.7 °F	68.0 °F	90 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:09 AM	70.3 °F	67.0 °F	90 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:14 AM	70.3 °F	67.0 °F	90 %	NW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:19 AM	70.2 °F	67.0 °F	90 %	NNE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:28 AM	69.8 °F	67.0 °F	91 %	NE	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:32 AM	69.7 °F	67.0 °F	91 %	NE	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:39 AM	69.6 °F	67.0 °F	90 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:42 AM	69.8 °F	67.0 °F	91 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:45 AM	69.7 °F	67.0 °F	91 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:52 AM	69.9 °F	67.0 °F	91 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:56 AM	69.8 °F	67.0 °F	91 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:03 AM	69.1 °F	66.0 °F	91 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:12 AM	68.9 °F	66.0 °F	91 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:19 AM	69.0 °F	67.0 °F	92 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:23 AM	68.9 °F	67.0 °F	92 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:29 AM	68.8 °F	66.0 °F	92 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:33 AM	68.8 °F	67.0 °F	93 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:38 AM	68.9 °F	67.0 °F	93 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:43 AM	68.9 °F	67.0 °F	93 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:49 AM	68.8 °F	67.0 °F	93 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:56 AM	68.2 °F	66.0 °F	93 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:03 AM	68.3 °F	66.0 °F	93 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:06 AM	68.2 °F	66.0 °F	93 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:14 AM	68.2 °F	66.0 °F	93 %	NE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
	Sunrise	6:37 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:09 PM											
		7:39 PM	86.8 °F	74.5 °F	67 %	WSW	7.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:44 PM	86.5 °F	74.0 °F	67 %	WSW	5.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:49 PM	86.4 °F	74.0 °F	67 %	WSW	7.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:54 PM	86.2 °F	74.0 °F	68 %	WSW	5.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:56 PM	86.0 °F	74.0 °F	68 %	West	6.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:04 PM	85.6 °F	74.0 °F	68 %	WSW	6.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:07 PM	85.2 °F	74.0 °F	68 %	West	4.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:14 PM	85.1 °F	74.0 °F	69 %	West	5.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:17 PM	84.9 °F	74.0 °F	69 %	West	5.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:24 PM	84.7 °F	73.3 °F	69 %	West	5.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:26 PM	84.4 °F	73.0 °F	69 %	West	5.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:32 PM	84.1 °F	73.0 °F	70 %	West	6.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:39 PM	84.0 °F	73.0 °F	70 %	West	5.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:44 PM	83.9 °F	73.0 °F	70 %	West	6.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:45 PM	83.9 °F	73.0 °F	70 %	West	5.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:54 PM	83.7 °F	73.0 °F	70 %	West	6.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		8:56 PM	83.6 °F	73.0 °F	70 %	WNW	5.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:02 PM	83.2 °F	72.0 °F	70 %	WNW	6.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:05 PM	83.1 °F	72.0 °F	70 %	West	5.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:13 PM	82.8 °F	73.0 °F	71 %	West	6.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:22 PM	82.2 °F	72.0 °F	71 %	WNW	6.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:27 PM	82.2 °F	72.0 °F	71 %	WNW	4.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:32 PM	82.1 °F	72.0 °F	71 %	WNW	4.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:39 PM	81.8 °F	71.5 °F	71 %	WNW	4.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:42 PM	81.7 °F	71.0 °F	70 %	WNW	4.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:49 PM	81.6 °F	71.0 °F	70 %	WNW	4.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:54 PM	81.4 °F	71.0 °F	70 %	WNW	6.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:57 PM	81.3 °F	71.0 °F	70 %	WNW	4.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:09 PM	80.9 °F	71.0 °F	71 %	West	5.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:14 PM	80.7 °F	71.0 °F	71 %	West	5.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:24 PM	80.2 °F	70.3 °F	72 %	West	2.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:29 PM	79.6 °F	70.0 °F	73 %	WSW	2.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:32 PM	79.3 °F	70.0 °F	74 %	WSW	2.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:37 PM	79.1 °F	70.5 °F	75 %	WSW	2.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:42 PM	79.0 °F	70.0 °F	75 %	WSW	2.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:48 PM	78.8 °F	70.5 °F	76 %	WSW	2.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:53 PM	78.6 °F	70.5 °F	76 %	WSW	2.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:59 PM	78.6 °F	70.0 °F	76 %	WNW	3.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:02 PM	78.5 °F	71.0 °F	77 %	West	3.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:13 PM	78.1 °F	70.5 °F	78 %	West	1.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:23 PM	77.4 °F	70.5 °F	79 %	West	0.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:28 PM	77.3 °F	70.0 °F	79 %	West	1.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:35 PM	77.2 °F	71.0 °F	80 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:41 PM	76.6 °F	70.0 °F	80 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:49 PM	76.1 °F	70.0 °F	81 %	West	0.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:54 PM	75.6 °F	70.0 °F	83 %	West	0.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:57 PM	75.5 °F	70.0 °F	83 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		12:01 AM	76.0 °F	71.0 °F	83 %	West	0.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		12:13 AM	76.1 °F	70.0 °F	82 %	West	0.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		12:18 AM	75.8 °F	70.0 °F	83 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		12:22 AM	75.6 °F	70.0 °F	83 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		12:29 AM	75.2 °F	70.0 °F	84 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		12:39 AM	75.2 °F	70.0 °F	84 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:44 AM	74.9 °F	70.0 °F	84 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:45 AM	74.7 °F	70.0 °F	85 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:54 AM	74.3 °F	70.0 °F	85 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:59 AM	73.9 °F	70.0 °F	86 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		1:00 AM	73.8 °F	69.0 °F	86 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		1:09 AM	73.4 °F	69.5 °F	87 %	East	3.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		1:12 AM	73.2 °F	69.0 °F	87 %	East	2.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		1:19 AM	73.2 °F	69.3 °F	87 %	East	5.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		1:23 AM	73.3 °F	70.0 °F	88 %	ENE	3.7 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
3	5/17/2025-5/18/2025	1:25 AM	73.1 °F	69.0 °F	87 %	ENE	4.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in	30-37	Yes
		1:31 AM	72.9 °F	69.0 °F	88 %	East	1.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		1:38 AM	73.1 °F	69.0 °F	88 %	East	0.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		1:44 AM	72.9 °F	69.0 °F	88 %	East	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		1:49 AM	72.9 °F	69.0 °F	88 %	East	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		1:53 AM	73.0 °F	69.0 °F	88 %	East	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		1:56 AM	73.0 °F	69.0 °F	88 %	East	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:04 AM	73.0 °F	69.0 °F	88 %	East	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:08 AM	72.9 °F	69.0 °F	88 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:13 AM	73.0 °F	70.0 °F	89 %	NE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:18 AM	73.6 °F	70.0 °F	88 %	NNW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:21 AM	73.7 °F	70.0 °F	88 %	NNE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:26 AM	72.8 °F	69.0 °F	87 %	SE	1.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:32 AM	72.7 °F	69.0 °F	88 %	SE	0.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:38 AM	72.1 °F	69.0 °F	89 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:47 AM	72.0 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:51 AM	71.8 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:03 AM	71.8 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:09 AM	71.6 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:13 AM	71.7 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:19 AM	71.7 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:24 AM	71.6 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:29 AM	71.8 °F	69.0 °F	91 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:34 AM	71.8 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:39 AM	71.9 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:44 AM	72.0 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:48 AM	72.0 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:54 AM	72.1 °F	69.3 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:58 AM	72.5 °F	70.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:03 AM	72.6 °F	70.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:07 AM	72.6 °F	70.0 °F	90 %	SE	0.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:12 AM	72.7 °F	70.0 °F	90 %	SE	1.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:17 AM	72.6 °F	70.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:24 AM	72.3 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:29 AM	72.2 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:34 AM	72.3 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		4:38 AM	72.3 °F	69.0 °F	90 %	SE	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		4:43 AM	72.3 °F	69.0 °F	90 %	SE	1.7 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		4:52 AM	72.6 °F	70.0 °F	90 %	SE	2.4 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:59 AM	72.8 °F	70.0 °F	90 %	NNW	3.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:04 AM	72.9 °F	70.0 °F	90 %	NNW	2.9 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:09 AM	73.0 °F	70.0 °F	90 %	NW	2.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:12 AM	73.1 °F	70.0 °F	90 %	NW	2.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:18 AM	73.1 °F	70.0 °F	90 %	NW	1.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:24 AM	73.2 °F	70.0 °F	90 %	NW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:25 AM	73.1 °F	70.0 °F	89 %	NW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:33 AM	72.3 °F	69.0 °F	89 %	NW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:39 AM	72.2 °F	69.0 °F	90 %	NW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:40 AM	71.9 °F	69.0 °F	90 %	NW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:46 AM	71.2 °F	68.0 °F	90 %	NW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:54 AM	71.3 °F	69.0 °F	91 %	NW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:59 AM	71.0 °F	68.3 °F	91 %	NW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		6:08 AM	70.6 °F	68.0 °F	91 %	NW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:10 AM	70.7 °F	68.0 °F	92 %	NW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:15 AM	70.6 °F	68.0 °F	92 %	NW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:22 AM	70.9 °F	69.0 °F	92 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:29 AM	70.3 °F	68.0 °F	91 %	NW	0.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:32 AM	70.4 °F	68.0 °F	92 %	NW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:36 AM	70.5 °F	68.0 °F	92 %	NW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:42 AM	70.4 °F	68.0 °F	92 %	NW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:50 AM	69.9 °F	68.0 °F	92 %	ENE	1.9 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:55 AM	70.3 °F	68.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:02 AM	70.3 °F	68.0 °F	92 %	ENE	2.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		7:08 AM	70.4 °F	68.0 °F	92 %	ENE	1.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
	Sunrise	6:37 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:10 PM											
		7:34 PM	86.5 °F	75.0 °F	68 %	WNW	**11.6 mph**	11.5 mph	29.94 in	0.00 in	0.00 in		
		7:49 PM	85.9 °F	75.0 °F	69 %	WNW	**10.7 mph**	17.3 mph	29.94 in	0.00 in	0.00 in		
		7:53 PM	85.8 °F	74.5 °F	69 %	WNW	**9.6 mph**	0.0 mph	29.94 in	0.00 in	0.00 in		
		8:03 PM	85.4 °F	74.0 °F	69 %	WNW	**9.1 mph**	16.1 mph	29.94 in	0.00 in	0.00 in		
		8:08 PM	85.0 °F	74.0 °F	70 %	West	8.4 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		8:13 PM	84.9 °F	74.0 °F	70 %	WNW	7.4 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		8:20 PM	84.6 °F	74.0 °F	70 %	West	7.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:39 PM	83.8 °F	73.0 °F	71 %	WNW	5.7 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:43 PM	83.5 °F	74.0 °F	72 %	WNW	4.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:47 PM	83.4 °F	74.0 °F	72 %	WNW	4.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:53 PM	83.1 °F	74.0 °F	73 %	West	4.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:57 PM	82.9 °F	73.0 °F	73 %	WNW	4.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:01 PM	82.8 °F	73.0 °F	73 %	WNW	4.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:06 PM	82.7 °F	74.0 °F	74 %	WNW	5.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:13 PM	82.4 °F	73.0 °F	74 %	WNW	5.9 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:18 PM	82.3 °F	73.5 °F	75 %	WNW	5.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:24 PM	82.0 °F	73.3 °F	75 %	WNW	5.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:27 PM	82.0 °F	73.0 °F	75 %	WNW	5.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:37 PM	81.6 °F	73.0 °F	76 %	WNW	4.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:42 PM	81.4 °F	73.0 °F	76 %	West	3.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:54 PM	80.5 °F	73.0 °F	77 %	West	2.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:56 PM	80.4 °F	73.0 °F	78 %	West	1.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:03 PM	80.3 °F	73.0 °F	78 %	West	2.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:09 PM	80.1 °F	73.0 °F	78 %	West	2.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:12 PM	79.7 °F	72.0 °F	78 %	West	1.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:18 PM	79.8 °F	73.0 °F	79 %	West	1.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:21 PM	79.5 °F	73.0 °F	79 %	West	1.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:34 PM	78.9 °F	72.0 °F	80 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:39 PM	78.8 °F	72.5 °F	81 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:40 PM	78.8 °F	73.0 °F	81 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:45 PM	78.4 °F	72.0 °F	81 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		10:53 PM	78.2 °F	72.0 °F	81 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		10:57 PM	77.9 °F	72.0 °F	82 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:04 PM	78.2 °F	72.0 °F	82 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:09 PM	78.0 °F	72.0 °F	82 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:13 PM	77.5 °F	72.0 °F	83 %	West	0.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:18 PM	77.5 °F	72.0 °F	83 %	West	0.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:24 PM	77.0 °F	72.0 °F	84 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:31 PM	77.0 °F	72.0 °F	84 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:36 PM	77.2 °F	72.0 °F	84 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:41 PM	77.4 °F	72.0 °F	83 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:46 PM	77.5 °F	72.0 °F	83 %	West	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		11:52 PM	76.3 °F	71.0 °F	84 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:58 PM	76.4 °F	72.0 °F	85 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:01 AM	76.6 °F	72.0 °F	85 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:08 AM	76.7 °F	72.0 °F	84 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:12 AM	76.7 °F	72.0 °F	85 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:19 AM	76.4 °F	72.0 °F	85 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:20 AM	76.3 °F	72.0 °F	85 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		12:29 AM	75.8 °F	71.3 °F	86 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:32 AM	75.1 °F	71.0 °F	87 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:44 AM	74.8 °F	71.0 °F	88 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:48 AM	74.9 °F	71.0 °F	88 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:52 AM	74.9 °F	71.0 °F	88 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:55 AM	74.8 °F	71.0 °F	88 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		1:03 AM	74.6 °F	71.0 °F	88 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:08 AM	74.6 °F	71.0 °F	88 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:17 AM	74.5 °F	71.0 °F	89 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:22 AM	74.5 °F	71.0 °F	88 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:28 AM	74.5 °F	71.0 °F	88 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
4	5/18/2025-5/19/2025	1:33 AM	74.3 °F	71.0 °F	88 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in	30-37	Yes
		1:38 AM	74.1 °F	70.5 °F	89 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:40 AM	73.8 °F	70.0 °F	89 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		1:49 AM	73.9 °F	71.0 °F	89 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		1:54 AM	73.8 °F	70.0 °F	89 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		1:58 AM	73.7 °F	70.5 °F	90 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		2:03 AM	73.6 °F	71.0 °F	90 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		2:09 AM	73.5 °F	71.0 °F	90 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:10 AM	73.5 °F	71.0 °F	90 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:15 AM	73.3 °F	70.0 °F	90 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:24 AM	73.2 °F	70.0 °F	90 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:29 AM	72.9 °F	70.0 °F	91 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:33 AM	73.1 °F	70.0 °F	91 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:39 AM	73.2 °F	70.8 °F	91 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		2:42 AM	73.1 °F	70.0 °F	91 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		2:47 AM	72.8 °F	70.0 °F	91 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		2:54 AM	72.7 °F	70.0 °F	91 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		2:59 AM	72.7 °F	70.0 °F	91 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:01 AM	72.6 °F	70.0 °F	91 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:07 AM	72.3 °F	70.0 °F	92 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:14 AM	72.3 °F	70.0 °F	92 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:18 AM	72.1 °F	70.0 °F	92 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:20 AM	72.1 °F	70.0 °F	92 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:29 AM	72.2 °F	70.0 °F	92 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:34 AM	72.2 °F	70.0 °F	92 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:37 AM	72.0 °F	70.0 °F	92 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:43 AM	71.6 °F	69.0 °F	92 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:49 AM	71.5 °F	69.0 °F	92 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:52 AM	71.6 °F	70.0 °F	93 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:09 AM	71.7 °F	70.0 °F	93 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:18 AM	71.5 °F	69.0 °F	93 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:21 AM	71.4 °F	69.0 °F	93 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:27 AM	71.5 °F	69.0 °F	93 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:34 AM	71.7 °F	70.0 °F	93 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:44 AM	71.5 °F	69.3 °F	93 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:49 AM	71.4 °F	69.0 °F	92 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:54 AM	71.3 °F	69.0 °F	92 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:59 AM	71.2 °F	69.0 °F	92 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		5:03 AM	71.8 °F	70.0 °F	93 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		5:05 AM	71.9 °F	70.0 °F	93 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		5:14 AM	72.1 °F	70.0 °F	93 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		5:26 AM	71.1 °F	69.0 °F	92 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		5:32 AM	70.6 °F	68.3 °F	92 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		5:39 AM	70.7 °F	69.0 °F	93 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:42 AM	70.9 °F	69.0 °F	93 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:46 AM	70.5 °F	68.0 °F	93 %	West	1.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:54 AM	70.2 °F	68.0 °F	93 %	West	2.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:57 AM	70.4 °F	68.0 °F	93 %	West	2.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:01 AM	70.4 °F	68.5 °F	94 %	West	2.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:05 AM	70.4 °F	68.0 °F	93 %	West	1.5 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:11 AM	70.3 °F	69.0 °F	94 %	West	1.2 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:18 AM	70.3 °F	69.0 °F	94 %	West	0.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:24 AM	70.3 °F	68.8 °F	94 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		6:32 AM	70.6 °F	69.0 °F	94 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:38 AM	70.7 °F	69.0 °F	94 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:42 AM	70.4 °F	68.0 °F	93 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		6:47 AM	70.5 °F	69.0 °F	94 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		6:51 AM	70.3 °F	69.0 °F	94 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		6:59 AM	70.1 °F	68.0 °F	94 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:04 AM	70.2 °F	69.0 °F	94 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:08 AM	70.1 °F	68.0 °F	94 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
	Sunrise	6:37 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:10 PM											
5	5/19/2025-5/20/2025	7:37 PM	86.8 °F	76.0 °F	69 %	West	9.6 mph	0.0 mph	29.90 in	0.00 in	0.00 in	30-37	Yes
		7:49 PM	86.2 °F	75.0 °F	70 %	West	9.8 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		7:54 PM	85.8 °F	75.0 °F	70 %	West	**10.4 mph**	17.3 mph	29.91 in	0.00 in	0.00 in		
		7:59 PM	85.7 °F	75.0 °F	71 %	West	**10.0 mph**	17.3 mph	29.91 in	0.00 in	0.00 in		
		8:08 PM	85.1 °F	75.0 °F	72 %	WSW	**10.7 mph**	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:12 PM	84.7 °F	75.0 °F	72 %	West	8.9 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:18 PM	84.4 °F	75.0 °F	73 %	West	7.3 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:24 PM	84.1 °F	75.0 °F	73 %	WSW	7.6 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:34 PM	83.6 °F	74.8 °F	74 %	WSW	8.5 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:39 PM	83.4 °F	75.0 °F	75 %	WSW	**9.3 mph**	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:43 PM	83.2 °F	75.0 °F	75 %	WSW	8.6 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:49 PM	83.1 °F	74.5 °F	75 %	WSW	7.4 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:53 PM	82.6 °F	74.3 °F	76 %	WSW	5.8 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:57 PM	82.4 °F	75.0 °F	77 %	WSW	6.1 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:02 PM	82.4 °F	75.0 °F	77 %	West	6.7 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:13 PM	82.1 °F	75.0 °F	78 %	WSW	5.1 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:19 PM	81.8 °F	74.0 °F	78 %	WSW	4.8 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:29 PM	81.4 °F	74.0 °F	79 %	SW	3.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:32 PM	81.1 °F	74.0 °F	80 %	SW	3.8 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:42 PM	80.6 °F	74.0 °F	81 %	WSW	3.2 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:47 PM	80.7 °F	74.0 °F	81 %	WSW	1.6 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:50 PM	80.8 °F	75.0 °F	81 %	WSW	2.5 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:56 PM	80.7 °F	74.0 °F	81 %	SW	1.5 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:01 PM	80.5 °F	74.0 °F	81 %	SW	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:05 PM	80.4 °F	74.0 °F	81 %	SW	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:14 PM	80.2 °F	74.0 °F	82 %	SW	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:18 PM	80.2 °F	74.0 °F	82 %	WSW	2.9 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:23 PM	80.2 °F	74.0 °F	82 %	West	3.2 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:29 PM	80.1 °F	74.3 °F	82 %	West	3.3 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:33 PM	80.2 °F	75.0 °F	83 %	West	3.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:38 PM	80.1 °F	75.0 °F	83 %	West	4.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:42 PM	80.0 °F	74.0 °F	83 %	West	4.5 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:48 PM	79.9 °F	74.0 °F	83 %	West	6.3 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:53 PM	79.9 °F	74.0 °F	83 %	West	5.7 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:59 PM	79.9 °F	74.0 °F	83 %	West	5.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		11:03 PM	79.8 °F	75.0 °F	84 %	West	6.5 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:09 PM	79.8 °F	75.0 °F	84 %	West	5.6 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:11 PM	79.8 °F	75.0 °F	84 %	West	6.4 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:17 PM	79.8 °F	75.0 °F	84 %	West	4.9 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:23 PM	79.8 °F	75.0 °F	84 %	West	5.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:27 PM	79.7 °F	75.0 °F	84 %	WSW	6.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:33 PM	79.7 °F	74.7 °F	84 %	West	5.2 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:39 PM	79.5 °F	74.0 °F	84 %	WSW	5.2 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:41 PM	79.4 °F	74.0 °F	84 %	West	5.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:53 PM	79.2 °F	74.0 °F	85 %	West	4.7 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		11:55 PM	79.1 °F	74.0 °F	85 %	West	3.2 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:03 AM	78.6 °F	74.0 °F	86 %	WSW	3.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:09 AM	78.5 °F	74.0 °F	86 %	WSW	3.3 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:14 AM	78.5 °F	74.0 °F	86 %	West	3.3 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:17 AM	78.4 °F	74.0 °F	86 %	West	3.6 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:24 AM	78.3 °F	74.0 °F	86 %	West	2.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:26 AM	78.3 °F	74.0 °F	86 %	West	3.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:32 AM	78.4 °F	74.0 °F	86 %	West	2.2 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:38 AM	78.4 °F	74.0 °F	86 %	West	2.5 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:41 AM	78.4 °F	74.0 °F	87 %	West	2.9 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:50 AM	78.2 °F	74.0 °F	87 %	WSW	2.7 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		12:59 AM	78.1 °F	74.0 °F	87 %	SW	2.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		1:04 AM	78.0 °F	74.0 °F	87 %	WSW	3.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		1:07 AM	78.1 °F	74.0 °F	87 %	West	3.9 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		1:13 AM	78.2 °F	74.0 °F	87 %	West	4.9 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		1:19 AM	78.2 °F	74.0 °F	87 %	WSW	3.5 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		1:22 AM	78.2 °F	74.0 °F	87 %	WSW	3.5 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		1:29 AM	77.8 °F	74.0 °F	87 %	WSW	3.8 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		1:34 AM	77.5 °F	74.0 °F	88 %	WSW	2.5 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		1:38 AM	77.3 °F	74.0 °F	88 %	WSW	2.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		1:41 AM	77.2 °F	74.0 °F	88 %	WSW	2.2 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		1:47 AM	77.2 °F	74.0 °F	88 %	WSW	2.5 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		1:54 AM	76.9 °F	73.0 °F	88 %	WSW	1.4 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		1:59 AM	76.9 °F	74.0 °F	89 %	WSW	0.8 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		2:00 AM	76.9 °F	74.0 °F	89 %	WSW	0.3 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		2:09 AM	76.8 °F	73.0 °F	89 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		2:13 AM	76.7 °F	73.0 °F	89 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		2:19 AM	76.8 °F	73.0 °F	89 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		2:24 AM	76.6 °F	73.0 °F	89 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		2:28 AM	76.4 °F	73.0 °F	89 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		2:33 AM	76.0 °F	73.0 °F	90 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		2:35 AM	75.8 °F	73.0 °F	90 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		2:49 AM	76.0 °F	73.0 °F	90 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		2:54 AM	75.7 °F	73.0 °F	90 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		2:59 AM	75.7 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		3:01 AM	75.7 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		3:09 AM	75.6 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		3:10 AM	75.6 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		3:19 AM	75.4 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		3:21 AM	75.3 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		3:28 AM	75.1 °F	72.5 °F	91 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		3:34 AM	75.0 °F	73.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		3:36 AM	75.0 °F	73.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		3:44 AM	74.9 °F	72.7 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		3:48 AM	75.0 °F	73.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		3:53 AM	75.1 °F	73.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		3:59 AM	75.0 °F	73.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:00 AM	75.0 °F	73.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:09 AM	74.9 °F	73.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:14 AM	74.8 °F	72.5 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:18 AM	74.7 °F	72.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:23 AM	74.5 °F	72.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:26 AM	74.2 °F	72.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:33 AM	74.0 °F	72.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:40 AM	74.1 °F	72.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:47 AM	73.9 °F	72.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:54 AM	73.8 °F	71.3 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		4:59 AM	73.7 °F	71.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		5:08 AM	73.6 °F	71.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		5:12 AM	73.6 °F	71.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		5:19 AM	73.7 °F	72.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		5:24 AM	73.3 °F	71.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		5:28 AM	73.2 °F	71.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		5:38 AM	73.1 °F	71.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		5:49 AM	72.9 °F	71.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		5:54 AM	72.7 °F	71.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		5:58 AM	72.5 °F	70.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		6:03 AM	72.6 °F	71.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		6:09 AM	72.9 °F	71.0 °F	94 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		6:12 AM	72.5 °F	70.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		6:16 AM	72.4 °F	70.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		6:22 AM	72.3 °F	70.3 °F	94 %	WSW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		6:27 AM	72.1 °F	70.0 °F	94 %	WSW	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		6:34 AM	72.2 °F	70.0 °F	94 %	WSW	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		6:38 AM	72.1 °F	70.0 °F	94 %	WSW	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		6:45 AM	72.3 °F	71.0 °F	94 %	WSW	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		6:51 AM	72.4 °F	71.0 °F	94 %	WSW	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		6:55 AM	72.2 °F	70.0 °F	94 %	WSW	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		7:08 AM	72.6 °F	71.0 °F	95 %	WSW	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
	Sunrise	6:36 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:10 PM											
6	5/20/2025-5/21/2025	7:38 PM	87.1 °F	66.0 °F	50 %	WSW	7.3 mph	0.0 mph	29.91 in	0.00 in	0.00 in	30-37	Yes
		7:42 PM	86.7 °F	67.0 °F	52 %	WSW	**9.5 mph**	0.0 mph	29.91 in	0.00 in	0.00 in		
		7:48 PM	86.3 °F	68.0 °F	54 %	WSW	**9.0 mph**	0.0 mph	29.91 in	0.00 in	0.00 in		
		7:54 PM	86.0 °F	68.0 °F	55 %	WSW	**9.1 mph**	0.0 mph	29.91 in	0.00 in	0.00 in		
		7:58 PM	85.6 °F	67.5 °F	56 %	WSW	8.5 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:04 PM	85.1 °F	68.0 °F	57 %	WSW	7.3 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:08 PM	84.8 °F	68.0 °F	58 %	WSW	6.9 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:11 PM	84.1 °F	68.0 °F	59 %	WSW	7.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:17 PM	83.9 °F	68.0 °F	60 %	WSW	7.9 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:21 PM	83.4 °F	69.0 °F	62 %	WSW	8.0 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:31 PM	82.8 °F	69.0 °F	64 %	WSW	6.7 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		8:44 PM	81.8 °F	70.0 °F	67 %	WSW	5.8 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:47 PM	81.7 °F	70.0 °F	67 %	WSW	6.4 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:58 PM	81.3 °F	70.0 °F	68 %	West	7.8 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		9:03 PM	81.0 °F	70.0 °F	69 %	West	7.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:08 PM	80.7 °F	70.0 °F	69 %	West	6.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:12 PM	80.5 °F	70.0 °F	70 %	West	8.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:19 PM	80.2 °F	70.0 °F	70 %	West	6.1 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:23 PM	80.0 °F	70.0 °F	71 %	West	6.6 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:28 PM	79.9 °F	70.0 °F	71 %	West	4.8 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:38 PM	79.5 °F	70.0 °F	72 %	West	6.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:43 PM	79.3 °F	70.0 °F	73 %	WSW	5.2 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:46 PM	79.0 °F	70.0 °F	73 %	WSW	3.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:52 PM	78.7 °F	70.0 °F	74 %	WSW	2.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:57 PM	78.5 °F	70.0 °F	75 %	WSW	2.3 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:03 PM	78.3 °F	70.0 °F	75 %	West	2.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:13 PM	77.9 °F	70.0 °F	76 %	West	3.2 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:17 PM	77.8 °F	70.0 °F	76 %	West	2.5 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:24 PM	77.5 °F	70.0 °F	77 %	West	1.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:28 PM	77.4 °F	70.0 °F	78 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:39 PM	77.1 °F	70.0 °F	78 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:43 PM	76.9 °F	70.0 °F	79 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:46 PM	76.8 °F	70.0 °F	80 %	West	1.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:52 PM	76.5 °F	70.0 °F	80 %	West	0.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:57 PM	75.9 °F	69.0 °F	80 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:04 PM	76.0 °F	70.0 °F	81 %	SW	0.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:08 PM	75.8 °F	69.0 °F	81 %	South	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:12 PM	75.4 °F	70.0 °F	82 %	South	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:19 PM	75.3 °F	70.0 °F	82 %	South	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:21 PM	75.2 °F	69.0 °F	82 %	South	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:29 PM	74.8 °F	69.0 °F	83 %	South	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:34 PM	74.8 °F	69.0 °F	83 %	South	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:39 PM	74.7 °F	69.0 °F	83 %	South	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:44 PM	74.2 °F	69.0 °F	83 %	South	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:49 PM	73.9 °F	69.0 °F	84 %	South	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:52 PM	73.7 °F	69.0 °F	84 %	South	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:59 PM	72.8 °F	68.0 °F	86 %	East	2.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:03 AM	72.4 °F	68.0 °F	87 %	East	1.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:09 AM	72.6 °F	69.0 °F	87 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:14 AM	72.3 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:17 AM	72.2 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:24 AM	72.3 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:25 AM	72.1 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:34 AM	72.3 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:35 AM	72.3 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:43 AM	72.1 °F	68.0 °F	88 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:48 AM	72.3 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:54 AM	71.9 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:55 AM	71.7 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:01 AM	71.5 °F	68.0 °F	88 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:09 AM	71.3 °F	68.0 °F	89 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:19 AM	71.0 °F	68.0 °F	89 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:24 AM	70.8 °F	68.0 °F	89 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:29 AM	70.6 °F	68.0 °F	90 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:37 AM	70.6 °F	68.0 °F	90 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		1:52 AM	70.5 °F	67.8 °F	90 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		1:57 AM	70.6 °F	68.0 °F	90 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		2:04 AM	70.3 °F	67.0 °F	90 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:09 AM	70.4 °F	67.0 °F	89 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:14 AM	70.0 °F	67.0 °F	89 %	East	1.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:18 AM	69.8 °F	67.0 °F	90 %	East	1.4 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:22 AM	69.9 °F	67.0 °F	90 %	East	1.2 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:29 AM	69.9 °F	67.0 °F	90 %	East	1.2 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:38 AM	69.9 °F	67.0 °F	90 %	East	1.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:43 AM	69.7 °F	67.0 °F	90 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:48 AM	69.7 °F	67.0 °F	90 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:51 AM	69.6 °F	67.0 °F	90 %	East	2.1 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:59 AM	69.6 °F	66.8 °F	90 %	East	1.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		3:04 AM	69.9 °F	67.0 °F	91 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		3:12 AM	70.3 °F	68.0 °F	91 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		3:17 AM	70.4 °F	68.0 °F	91 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		3:24 AM	70.1 °F	67.0 °F	91 %	East	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:25 AM	70.1 °F	67.0 °F	91 %	East	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:34 AM	70.4 °F	68.0 °F	91 %	East	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:38 AM	70.3 °F	68.0 °F	91 %	East	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:49 AM	70.1 °F	67.5 °F	91 %	East	1.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:54 AM	69.8 °F	67.5 °F	92 %	East	1.6 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:58 AM	69.8 °F	67.0 °F	92 %	East	1.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:03 AM	69.6 °F	67.0 °F	92 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:08 AM	69.6 °F	67.0 °F	92 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:14 AM	69.3 °F	67.0 °F	92 %	East	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:19 AM	69.4 °F	67.0 °F	92 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:28 AM	69.6 °F	67.0 °F	92 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:31 AM	69.2 °F	67.0 °F	92 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:39 AM	69.5 °F	67.7 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:43 AM	69.5 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:48 AM	69.9 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:53 AM	70.1 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		4:58 AM	70.4 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:04 AM	70.8 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:09 AM	70.9 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:14 AM	71.0 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		5:19 AM	70.9 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:23 AM	70.9 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:32 AM	70.9 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:44 AM	71.1 °F	69.0 °F	92 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:49 AM	71.1 °F	69.0 °F	92 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:54 AM	71.1 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:59 AM	70.9 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:04 AM	70.9 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		6:08 AM	71.0 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:11 AM	71.2 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:24 AM	70.9 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:29 AM	70.9 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:32 AM	71.1 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:39 AM	71.4 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:42 AM	71.4 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:49 AM	71.5 °F	69.3 °F	93 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:51 AM	71.5 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		7:06 AM	71.2 °F	69.0 °F	93 %	ESE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
	Sunrise	6:35 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:11 PM											
7	5/21/2025-5/22/2025	7:41 PM	85.5 °F	73.0 °F	66 %	West	**10.1 mph**	0.0 mph	29.93 in	0.00 in	0.00 in	30-37	No - sustained wind speeds greater than 9 mph for more than 30 minutes within first 5 hours of survey
		7:51 PM	85.1 °F	73.0 °F	67 %	West	**11.9 mph**	0.0 mph	29.94 in	0.00 in	0.00 in		
		7:56 PM	84.8 °F	73.0 °F	68 %	West	**10.4 mph**	0.0 mph	29.94 in	0.00 in	0.00 in		
		8:04 PM	84.6 °F	73.0 °F	68 %	West	**10.1 mph**	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:17 PM	84.1 °F	73.0 °F	69 %	West	**9.9 mph**	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:24 PM	83.8 °F	73.0 °F	71 %	West	**11.8 mph**	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:29 PM	83.5 °F	73.0 °F	71 %	West	8.4 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:33 PM	83.3 °F	73.0 °F	72 %	West	**9.2 mph**	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:37 PM	83.1 °F	73.0 °F	72 %	WSW	8.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:42 PM	82.9 °F	73.0 °F	73 %	West	6.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:46 PM	82.7 °F	74.0 °F	74 %	West	7.5 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		8:53 PM	82.4 °F	74.0 °F	75 %	West	6.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		8:57 PM	82.2 °F	74.0 °F	75 %	West	5.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:04 PM	82.0 °F	73.0 °F	75 %	WSW	4.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:09 PM	81.5 °F	73.0 °F	76 %	WSW	4.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:13 PM	81.4 °F	73.0 °F	76 %	WSW	5.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:18 PM	81.1 °F	73.0 °F	77 %	WSW	6.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:22 PM	80.9 °F	73.3 °F	78 %	West	5.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:28 PM	80.8 °F	73.5 °F	79 %	West	5.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		9:33 PM	80.5 °F	73.5 °F	79 %	WSW	5.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:40 PM	80.3 °F	74.0 °F	80 %	West	7.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:49 PM	80.2 °F	74.0 °F	80 %	West	7.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		9:55 PM	79.8 °F	74.0 °F	81 %	WSW	5.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:09 PM	79.4 °F	74.0 °F	82 %	West	6.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:14 PM	79.4 °F	74.0 °F	83 %	West	6.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:24 PM	79.1 °F	74.0 °F	83 %	WSW	5.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:29 PM	78.9 °F	74.0 °F	84 %	West	6.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:37 PM	78.8 °F	74.0 °F	84 %	West	5.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:44 PM	78.7 °F	74.0 °F	84 %	West	5.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:48 PM	78.6 °F	73.0 °F	84 %	West	4.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		10:52 PM	78.5 °F	73.0 °F	84 %	WSW	4.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:02 PM	78.0 °F	73.0 °F	85 %	WSW	4.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		11:06 PM	77.8 °F	73.0 °F	85 %	WSW	4.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:14 PM	77.4 °F	73.0 °F	86 %	WSW	3.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:19 PM	77.4 °F	73.0 °F	86 %	WSW	3.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:20 PM	77.4 °F	73.0 °F	86 %	WSW	3.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:34 PM	77.1 °F	73.0 °F	86 %	WSW	4.9 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:39 PM	77.1 °F	73.0 °F	87 %	WSW	4.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:41 PM	77.0 °F	73.0 °F	87 %	WSW	5.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:48 PM	76.6 °F	73.0 °F	87 %	WSW	4.2 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:54 PM	76.6 °F	73.0 °F	88 %	WSW	5.2 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		11:57 PM	76.6 °F	73.0 °F	87 %	WSW	5.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:02 AM	76.5 °F	73.0 °F	88 %	WSW	4.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:09 AM	76.4 °F	73.0 °F	88 %	West	5.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:19 AM	76.3 °F	73.0 °F	88 %	West	4.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:22 AM	76.2 °F	73.0 °F	88 %	West	3.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:29 AM	76.2 °F	73.0 °F	88 %	West	4.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:32 AM	76.1 °F	72.3 °F	88 %	West	4.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:37 AM	75.9 °F	72.0 °F	88 %	West	3.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:43 AM	75.9 °F	73.0 °F	89 %	West	4.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:54 AM	75.6 °F	72.0 °F	89 %	West	2.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		12:58 AM	75.5 °F	72.0 °F	89 %	West	2.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		1:00 AM	75.4 °F	72.0 °F	89 %	West	1.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		1:07 AM	75.3 °F	72.0 °F	90 %	West	1.9 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		1:14 AM	75.2 °F	72.0 °F	90 %	West	2.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:19 AM	75.0 °F	72.0 °F	90 %	West	1.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:24 AM	74.8 °F	72.0 °F	90 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:28 AM	74.9 °F	72.0 °F	90 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:37 AM	74.9 °F	72.0 °F	91 %	WNW	2.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:44 AM	74.8 °F	72.0 °F	91 %	West	3.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:45 AM	74.9 °F	72.0 °F	91 %	West	3.7 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:54 AM	75.0 °F	72.0 °F	91 %	West	2.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:59 AM	75.1 °F	72.0 °F	91 %	West	2.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		2:04 AM	75.0 °F	72.0 °F	91 %	West	0.7 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		2:07 AM	74.9 °F	72.0 °F	91 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		2:14 AM	74.6 °F	72.0 °F	91 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		2:18 AM	74.4 °F	72.0 °F	91 %	West	1.9 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		2:21 AM	74.5 °F	72.0 °F	91 %	West	2.1 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		2:29 AM	74.4 °F	72.0 °F	92 %	West	2.3 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		2:31 AM	74.5 °F	72.0 °F	91 %	West	2.5 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:38 AM	74.7 °F	72.0 °F	92 %	West	2.4 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:44 AM	74.7 °F	72.0 °F	92 %	WNW	3.2 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:47 AM	74.7 °F	72.0 °F	92 %	WNW	3.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:52 AM	74.8 °F	72.0 °F	92 %	NW	3.9 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		2:56 AM	74.9 °F	73.0 °F	92 %	WNW	3.9 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		3:04 AM	75.0 °F	73.0 °F	92 %	WNW	4.2 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		3:07 AM	75.1 °F	73.0 °F	92 %	WNW	3.9 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		3:14 AM	75.0 °F	73.0 °F	92 %	WNW	3.9 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:18 AM	75.0 °F	73.0 °F	92 %	WNW	3.6 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:24 AM	75.0 °F	73.0 °F	92 %	WNW	3.8 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:26 AM	75.0 °F	73.0 °F	92 %	WNW	4.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:34 AM	74.9 °F	73.0 °F	92 %	WNW	3.9 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:42 AM	75.0 °F	73.0 °F	92 %	WNW	3.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:48 AM	75.0 °F	73.0 °F	92 %	WNW	3.1 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:52 AM	75.0 °F	73.0 °F	92 %	WNW	2.7 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		3:59 AM	75.0 °F	73.0 °F	92 %	West	2.8 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:04 AM	74.9 °F	73.0 °F	92 %	WNW	3.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:08 AM	74.8 °F	72.5 °F	92 %	West	3.3 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:14 AM	74.8 °F	72.0 °F	92 %	WNW	2.8 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:18 AM	74.8 °F	72.0 °F	92 %	WNW	2.7 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:24 AM	74.6 °F	72.0 °F	92 %	West	3.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:29 AM	74.6 °F	72.0 °F	92 %	West	2.9 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:33 AM	74.5 °F	72.0 °F	93 %	West	3.2 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:43 AM	74.3 °F	72.0 °F	93 %	West	2.2 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		4:59 AM	73.9 °F	72.0 °F	93 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		5:09 AM	73.3 °F	71.0 °F	93 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		5:10 AM	73.2 °F	71.0 °F	93 %	West	0.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		5:17 AM	73.2 °F	71.0 °F	94 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:23 AM	73.2 °F	71.0 °F	94 %	West	1.1 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:28 AM	72.7 °F	71.0 °F	94 %	West	0.1 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:30 AM	72.8 °F	71.0 °F	94 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:38 AM	72.8 °F	71.0 °F	94 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:44 AM	72.8 °F	71.0 °F	94 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:48 AM	72.6 °F	71.0 °F	94 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:52 AM	72.4 °F	71.0 °F	94 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		5:59 AM	72.6 °F	71.0 °F	94 %	West	0.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		6:02 AM	72.6 °F	71.0 °F	94 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:08 AM	72.6 °F	71.0 °F	95 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:12 AM	72.0 °F	70.0 °F	94 %	West	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:17 AM	72.1 °F	71.0 °F	95 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:24 AM	72.3 °F	71.0 °F	95 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:28 AM	72.5 °F	71.0 °F	95 %	West	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:34 AM	72.6 °F	71.0 °F	95 %	West	0.6 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:35 AM	72.9 °F	71.0 °F	95 %	West	1.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:44 AM	73.1 °F	71.8 °F	95 %	West	0.9 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		6:49 AM	72.2 °F	71.0 °F	95 %	West	0.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		6:51 AM	72.3 °F	71.0 °F	95 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		6:57 AM	71.7 °F	70.0 °F	95 %	West	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		7:04 AM	71.8 °F	70.4 °F	95 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		7:08 AM	71.9 °F	70.5 °F	95 %	West	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
	Sunrise	6:35 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:12 PM											
		7:39 PM	74.3 °F	73.0 °F	94 %	NW	0.0 mph	0.0 mph	29.96 in	0.00 in	1.82 in		
		7:44 PM	74.5 °F	73.0 °F	94 %	East	0.4 mph	0.0 mph	29.96 in	0.00 in	1.82 in		
		7:49 PM	74.6 °F	73.0 °F	94 %	ESE	1.7 mph	0.0 mph	29.96 in	0.00 in	1.82 in		
		7:54 PM	74.6 °F	72.7 °F	93 %	ESE	0.0 mph	0.0 mph	29.97 in	0.00 in	1.82 in		
		7:59 PM	74.4 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.97 in	0.00 in	1.82 in		
		8:04 PM	74.5 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.97 in	0.00 in	1.82 in		
		8:09 PM	74.3 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.98 in	0.00 in	1.82 in		
		8:14 PM	74.1 °F	72.1 °F	94 %	ESE	0.0 mph	0.0 mph	29.98 in	0.00 in	1.82 in		
		8:19 PM	73.8 °F	72.0 °F	94 %	ESE	1.2 mph	0.0 mph	29.98 in	0.00 in	1.82 in		
		8:24 PM	73.7 °F	72.0 °F	94 %	ESE	1.9 mph	0.0 mph	29.98 in	0.00 in	1.82 in		
		8:29 PM	73.8 °F	72.0 °F	94 %	ESE	1.8 mph	0.0 mph	29.98 in	0.00 in	1.82 in		
		8:34 PM	73.5 °F	72.0 °F	94 %	ESE	1.9 mph	0.0 mph	29.98 in	0.00 in	1.82 in		
		8:39 PM	73.5 °F	71.6 °F	94 %	ESE	2.1 mph	0.0 mph	29.98 in	0.00 in	1.82 in		
		8:44 PM	73.4 °F	72.0 °F	94 %	ESE	1.2 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		8:49 PM	73.3 °F	72.0 °F	94 %	ESE	0.1 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		8:54 PM	73.3 °F	71.8 °F	94 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		8:59 PM	73.1 °F	71.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		9:04 PM	73.0 °F	71.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		9:09 PM	73.1 °F	71.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		9:14 PM	73.0 °F	71.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		9:19 PM	72.9 °F	71.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		9:24 PM	72.9 °F	71.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		9:29 PM	73.0 °F	71.0 °F	94 %	ESE	1.0 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		9:34 PM	73.1 °F	71.0 °F	94 %	ESE	1.4 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		9:39 PM	73.1 °F	71.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		9:44 PM	73.0 °F	71.0 °F	94 %	ESE	0.6 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		9:49 PM	72.8 °F	71.0 °F	94 %	ESE	2.2 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		9:54 PM	73.0 °F	71.0 °F	94 %	ESE	0.8 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		9:59 PM	73.1 °F	71.2 °F	94 %	ESE	1.5 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		10:04 PM	73.0 °F	71.0 °F	94 %	East	3.5 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		10:09 PM	73.0 °F	71.0 °F	94 %	East	5.1 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		10:14 PM	73.0 °F	71.0 °F	94 %	East	4.1 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		10:19 PM	72.8 °F	71.0 °F	94 %	East	2.9 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		10:24 PM	73.0 °F	71.0 °F	94 %	ENE	2.5 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		10:29 PM	73.2 °F	71.4 °F	94 %	ENE	1.2 mph	0.0 mph	30.02 in	0.00 in	1.82 in		
		10:34 PM	73.3 °F	72.0 °F	94 %	ENE	0.4 mph	0.0 mph	30.02 in	0.00 in	1.82 in		
		10:39 PM	73.3 °F	71.8 °F	94 %	ENE	0.0 mph	0.0 mph	30.02 in	0.00 in	1.82 in		
		10:44 PM	73.0 °F	71.0 °F	94 %	ENE	1.3 mph	0.0 mph	30.02 in	0.00 in	1.82 in		
		10:49 PM	73.0 °F	71.1 °F	94 %	ENE	3.1 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		10:54 PM	73.2 °F	71.7 °F	95 %	ESE	4.1 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		10:59 PM	73.1 °F	71.0 °F	94 %	ESE	3.7 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		11:04 PM	73.1 °F	71.5 °F	95 %	East	3.6 mph	0.0 mph	30.01 in	0.00 in	1.82 in		
		11:09 PM	73.0 °F	71.0 °F	94 %	East	4.0 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		11:14 PM	72.9 °F	71.0 °F	94 %	East	3.4 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		11:19 PM	72.9 °F	71.0 °F	94 %	ESE	3.2 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		11:24 PM	72.9 °F	71.0 °F	94 %	ESE	4.0 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		11:29 PM	73.0 °F	71.0 °F	94 %	ESE	4.7 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		11:34 PM	73.1 °F	71.0 °F	94 %	ESE	5.5 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		11:39 PM	73.2 °F	71.0 °F	94 %	ESE	4.1 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		11:44 PM	73.2 °F	71.0 °F	94 %	ESE	3.1 mph	0.0 mph	29.99 in	0.00 in	1.82 in		
		11:49 PM	73.2 °F	71.2 °F	94 %	East	2.3 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		11:54 PM	73.2 °F	71.2 °F	94 %	East	1.3 mph	0.0 mph	30.00 in	0.00 in	1.82 in		
		11:59 PM	73.0 °F	71.0 °F	94 %	NE	1.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:04 AM	72.9 °F	71.0 °F	94 %	-	2.5 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:09 AM	72.9 °F	71.0 °F	94 %	NNW	2.4 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:14 AM	72.8 °F	71.0 °F	94 %	NNW	1.9 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:19 AM	72.9 °F	71.0 °F	94 %	North	2.3 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:24 AM	72.8 °F	71.0 °F	94 %	NNE	2.5 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:29 AM	72.8 °F	71.0 °F	94 %	NE	3.2 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:34 AM	72.8 °F	71.0 °F	94 %	ENE	3.4 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:39 AM	72.8 °F	71.0 °F	94 %	NE	3.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:44 AM	72.8 °F	71.0 °F	94 %	ENE	3.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:49 AM	72.7 °F	71.0 °F	94 %	ENE	1.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:54 AM	72.7 °F	71.0 °F	94 %	ENE	0.9 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:59 AM	72.6 °F	71.0 °F	94 %	ENE	0.1 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:04 AM	72.6 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:09 AM	72.6 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:14 AM	72.5 °F	71.0 °F	94 %	ENE	0.6 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:19 AM	72.6 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
8	5/22/2025-5/23/2025	1:24 AM	72.5 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in	30-37	Yes
		1:29 AM	72.5 °F	71.0 °F	95 %	ENE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:34 AM	72.6 °F	71.0 °F	95 %	ENE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:39 AM	72.5 °F	71.0 °F	95 %	ENE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:44 AM	72.5 °F	71.0 °F	95 %	ENE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:49 AM	72.4 °F	71.0 °F	95 %	East	0.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:54 AM	72.3 °F	71.0 °F	95 %	East	0.7 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:59 AM	72.4 °F	71.0 °F	95 %	East	0.9 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:04 AM	72.5 °F	71.0 °F	95 %	East	1.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:09 AM	72.4 °F	71.0 °F	95 %	East	0.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:14 AM	72.3 °F	71.0 °F	95 %	East	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:19 AM	72.2 °F	71.0 °F	95 %	East	1.4 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:24 AM	72.3 °F	71.0 °F	95 %	East	2.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:29 AM	72.3 °F	71.0 °F	95 %	ENE	1.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:34 AM	72.2 °F	71.0 °F	95 %	ENE	2.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:39 AM	72.2 °F	71.0 °F	95 %	ENE	1.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:44 AM	72.1 °F	71.0 °F	95 %	ENE	0.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:49 AM	72.2 °F	71.0 °F	95 %	ENE	1.7 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:54 AM	72.3 °F	71.0 °F	95 %	ENE	0.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:59 AM	72.3 °F	71.0 °F	95 %	ENE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:04 AM	72.2 °F	71.0 °F	95 %	ENE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:09 AM	72.2 °F	71.0 °F	95 %	ENE	2.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:14 AM	72.3 °F	71.0 °F	95 %	NE	2.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:19 AM	72.3 °F	71.0 °F	95 %	ENE	2.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:24 AM	72.3 °F	71.0 °F	95 %	NE	2.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:29 AM	72.3 °F	71.0 °F	95 %	NE	1.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:34 AM	72.3 °F	71.0 °F	95 %	NE	0.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:39 AM	72.3 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:44 AM	72.3 °F	71.0 °F	95 %	NNE	1.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:49 AM	72.3 °F	71.0 °F	95 %	NNE	1.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:54 AM	72.4 °F	71.0 °F	95 %	NNE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:59 AM	72.4 °F	71.0 °F	95 %	NNE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:04 AM	72.4 °F	71.0 °F	95 %	NNE	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:09 AM	72.4 °F	71.0 °F	95 %	NNE	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:14 AM	72.4 °F	71.0 °F	95 %	NNE	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:19 AM	72.3 °F	71.0 °F	95 %	NNE	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:24 AM	72.4 °F	71.0 °F	95 %	NNE	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:29 AM	72.4 °F	71.0 °F	95 %	ENE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:34 AM	72.2 °F	71.0 °F	95 %	ENE	1.8 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:39 AM	72.3 °F	71.0 °F	95 %	East	2.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:44 AM	72.3 °F	71.0 °F	95 %	ENE	2.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:49 AM	72.3 °F	71.0 °F	95 %	NE	2.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:54 AM	72.4 °F	71.0 °F	95 %	ENE	2.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:59 AM	72.4 °F	71.0 °F	95 %	NE	1.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:04 AM	72.3 °F	71.0 °F	95 %	NE	2.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:09 AM	72.3 °F	71.0 °F	95 %	NE	2.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:14 AM	72.3 °F	71.0 °F	95 %	NE	2.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:19 AM	72.3 °F	71.0 °F	95 %	NE	1.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:24 AM	72.4 °F	71.0 °F	95 %	NE	1.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:29 AM	72.5 °F	71.0 °F	95 %	NE	0.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:34 AM	72.4 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:39 AM	72.4 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:44 AM	72.4 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:49 AM	72.4 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:54 AM	72.4 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:59 AM	72.4 °F	71.0 °F	95 %	NE	0.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:04 AM	72.3 °F	71.0 °F	95 %	NE	1.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:09 AM	72.3 °F	71.0 °F	95 %	NE	0.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:14 AM	72.3 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:19 AM	72.3 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:24 AM	72.4 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:29 AM	72.4 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:34 AM	72.3 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:39 AM	72.3 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:44 AM	72.3 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:49 AM	72.3 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:54 AM	72.3 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:59 AM	72.3 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:04 AM	72.5 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:09 AM	72.6 °F	71.0 °F	95 %	NE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
	Sunrise	6:35 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:13 PM											
		7:39 PM	89.5 °F	71.5 °F	56 %	ENE	5.2 mph	3.3 mph	30.00 in	0.00 in	0.00 in		
		7:44 PM	88.4 °F	73.9 °F	62 %	ESE	**11.4 mph**	17.3 mph	30.01 in	0.00 in	0.00 in		
		7:49 PM	86.6 °F	73.2 °F	65 %	ESE	**9.1 mph**	15.5 mph	30.01 in	0.00 in	0.00 in		
		7:54 PM	85.4 °F	73.0 °F	66 %	ESE	**15.2 mph**	22.5 mph	30.01 in	0.00 in	0.00 in		
		7:59 PM	84.6 °F	73.0 °F	68 %	East	**12.2 mph**	24.2 mph	30.02 in	0.00 in	0.00 in		
		8:04 PM	84.1 °F	72.1 °F	68 %	ESE	**13.3 mph**	22.8 mph	30.02 in	0.00 in	0.00 in		
		8:09 PM	83.9 °F	72.0 °F	67 %	ESE	**13.3 mph**	19.6 mph	30.02 in	0.00 in	0.00 in		
		8:14 PM	83.6 °F	71.7 °F	67 %	ESE	**14.5 mph**	21.2 mph	30.03 in	0.00 in	0.00 in		
		8:19 PM	83.3 °F	71.3 °F	67 %	ESE	**12.1 mph**	21.9 mph	30.03 in	0.00 in	0.00 in		
		8:24 PM	82.9 °F	71.6 °F	69 %	ESE	**10.1 mph**	8.7 mph	30.03 in	0.00 in	0.00 in		
		8:29 PM	82.5 °F	71.7 °F	70 %	ESE	**9.5 mph**	0.0 mph	30.03 in	0.00 in	0.00 in		
		8:34 PM	82.2 °F	71.5 °F	70 %	ESE	**10.0 mph**	8.1 mph	30.04 in	0.00 in	0.00 in		
		8:39 PM	81.9 °F	72.0 °F	71 %	East	**10.1 mph**	16.1 mph	30.04 in	0.00 in	0.00 in		
		8:44 PM	81.7 °F	72.0 °F	72 %	ESE	**10.1 mph**	1.6 mph	30.04 in	0.00 in	0.00 in		
		8:49 PM	81.5 °F	72.0 °F	73 %	ESE	**9.7 mph**	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:54 PM	81.4 °F	72.0 °F	73 %	ESE	8.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:59 PM	81.3 °F	72.0 °F	74 %	ESE	**10.4 mph**	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:04 PM	81.3 °F	72.8 °F	75 %	ESE	**12.1 mph**	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:09 PM	80.9 °F	72.6 °F	75 %	ESE	**14.2 mph**	14.4 mph	30.06 in	0.00 in	0.00 in		
		9:14 PM	79.8 °F	72.0 °F	77 %	ESE	**15.0 mph**	24.2 mph	30.06 in	0.00 in	0.00 in		
		9:19 PM	78.9 °F	72.0 °F	79 %	ESE	**12.6 mph**	18.9 mph	30.06 in	0.00 in	0.00 in		
		9:24 PM	78.5 °F	72.0 °F	80 %	SE	**9.8 mph**	19.6 mph	30.06 in	0.00 in	0.00 in		
		9:29 PM	78.1 °F	71.7 °F	80 %	SE	**9.2 mph**	5.9 mph	30.07 in	0.00 in	0.00 in		
		9:34 PM	78.0 °F	71.7 °F	81 %	ESE	**9.2 mph**	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:39 PM	77.8 °F	71.7 °F	81 %	ESE	8.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:44 PM	77.5 °F	71.0 °F	81 %	ESE	8.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:49 PM	77.2 °F	71.0 °F	82 %	ESE	8.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:54 PM	76.9 °F	71.0 °F	82 %	ESE	7.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:59 PM	76.6 °F	71.0 °F	83 %	ESE	6.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:04 PM	76.4 °F	71.0 °F	83 %	ESE	6.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:09 PM	76.2 °F	71.0 °F	84 %	SE	4.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:14 PM	76.1 °F	71.0 °F	84 %	SE	3.8 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:19 PM	75.9 °F	71.0 °F	85 %	SSE	4.8 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:24 PM	75.7 °F	71.0 °F	86 %	SE	4.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:29 PM	75.6 °F	71.0 °F	86 %	SE	3.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:34 PM	75.3 °F	71.0 °F	86 %	South	4.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:39 PM	75.1 °F	71.0 °F	87 %	South	4.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:44 PM	74.9 °F	71.0 °F	87 %	South	1.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:49 PM	74.7 °F	71.0 °F	87 %	SSW	0.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:54 PM	74.6 °F	71.0 °F	88 %	SW	3.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:59 PM	74.5 °F	71.0 °F	88 %	SW	2.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:04 PM	74.4 °F	71.0 °F	88 %	SW	0.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:09 PM	74.6 °F	71.0 °F	88 %	SW	0.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:14 PM	74.4 °F	71.0 °F	88 %	SW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:19 PM	74.3 °F	71.0 °F	88 %	SW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:24 PM	74.2 °F	71.0 °F	89 %	SW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:29 PM	74.2 °F	71.0 °F	89 %	SW	0.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:34 PM	74.2 °F	71.0 °F	89 %	West	1.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:39 PM	74.2 °F	71.0 °F	89 %	West	0.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:44 PM	74.2 °F	71.0 °F	89 %	West	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:49 PM	74.2 °F	71.0 °F	89 %	West	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:54 PM	74.2 °F	71.0 °F	89 %	West	0.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:59 PM	74.2 °F	71.0 °F	89 %	West	1.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:04 AM	73.9 °F	70.8 °F	89 %	West	0.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:09 AM	73.7 °F	71.0 °F	90 %	West	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:14 AM	73.8 °F	71.0 °F	90 %	West	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:19 AM	73.7 °F	71.0 °F	90 %	West	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:24 AM	73.7 °F	71.0 °F	90 %	ENE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:29 AM	73.5 °F	70.7 °F	90 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:34 AM	73.3 °F	70.0 °F	90 %	ENE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:39 AM	73.4 °F	71.0 °F	91 %	NE	2.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:44 AM	73.3 °F	70.5 °F	91 %	ENE	2.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:49 AM	73.1 °F	70.0 °F	90 %	East	2.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:54 AM	73.0 °F	70.0 °F	91 %	ENE	4.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:59 AM	72.9 °F	70.0 °F	91 %	ENE	3.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:04 AM	72.8 °F	70.0 °F	91 %	ENE	4.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:09 AM	72.7 °F	70.0 °F	91 %	ENE	3.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:14 AM	72.6 °F	70.0 °F	91 %	East	4.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:19 AM	72.5 °F	70.0 °F	91 %	East	3.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
9	5/23/2025-5/24/2025	1:24 AM	72.3 °F	70.0 °F	91 %	East	4.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in	30-37	No - sustained wind speeds greater than 9 mph for more than 30 minutes within first 5 hours of survey
		1:29 AM	72.2 °F	70.0 °F	91 %	East	5.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:34 AM	72.1 °F	69.3 °F	91 %	East	4.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:39 AM	72.1 °F	69.0 °F	91 %	East	5.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:44 AM	72.0 °F	69.1 °F	91 %	East	5.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:49 AM	71.9 °F	69.3 °F	91 %	ESE	4.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:54 AM	71.9 °F	69.0 °F	91 %	ESE	4.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:59 AM	71.9 °F	69.5 °F	92 %	ESE	5.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:04 AM	72.0 °F	69.6 °F	92 %	ESE	4.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:09 AM	71.9 °F	69.7 °F	92 %	ESE	3.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:14 AM	71.9 °F	69.9 °F	92 %	ESE	2.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:19 AM	71.9 °F	69.1 °F	91 %	East	3.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:24 AM	71.8 °F	69.0 °F	91 %	East	2.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:29 AM	71.7 °F	69.0 °F	91 %	East	3.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:34 AM	71.7 °F	69.0 °F	91 %	East	4.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:39 AM	71.6 °F	69.0 °F	92 %	ENE	2.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:44 AM	71.5 °F	69.0 °F	92 %	ENE	2.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:49 AM	71.5 °F	69.0 °F	92 %	ENE	3.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:54 AM	71.4 °F	69.0 °F	92 %	ENE	2.6 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:59 AM	71.3 °F	69.0 °F	91 %	ENE	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:04 AM	71.3 °F	69.0 °F	92 %	ENE	1.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:09 AM	71.3 °F	69.0 °F	91 %	East	2.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:14 AM	71.3 °F	69.0 °F	91 %	ESE	1.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:19 AM	71.3 °F	69.0 °F	91 %	ESE	2.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:24 AM	71.3 °F	69.0 °F	91 %	East	2.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:29 AM	71.3 °F	69.0 °F	91 %	East	4.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:34 AM	71.3 °F	69.0 °F	91 %	East	3.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:39 AM	71.1 °F	68.3 °F	91 %	ESE	3.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:44 AM	71.1 °F	68.0 °F	91 %	East	4.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:49 AM	71.1 °F	68.0 °F	91 %	East	4.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:54 AM	71.0 °F	68.0 °F	91 %	ENE	2.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:59 AM	70.9 °F	68.2 °F	92 %	NE	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:04 AM	70.7 °F	68.0 °F	92 %	NE	0.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:09 AM	70.6 °F	68.0 °F	92 %	NE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:14 AM	70.6 °F	68.0 °F	92 %	NE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:19 AM	70.7 °F	68.0 °F	92 %	NE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:24 AM	70.6 °F	68.0 °F	92 %	NE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:29 AM	70.6 °F	68.3 °F	92 %	NE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:34 AM	70.7 °F	68.8 °F	93 %	NE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:39 AM	70.7 °F	68.6 °F	93 %	NE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:44 AM	70.7 °F	68.8 °F	93 %	NE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:49 AM	70.6 °F	68.0 °F	92 %	NE	1.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:54 AM	70.5 °F	68.0 °F	92 %	NE	1.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:59 AM	70.6 °F	68.4 °F	93 %	NE	1.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:04 AM	70.5 °F	68.0 °F	93 %	NE	2.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:09 AM	70.4 °F	68.0 °F	92 %	ENE	1.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:14 AM	70.4 °F	68.0 °F	92 %	East	1.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:19 AM	70.3 °F	68.0 °F	92 %	East	1.6 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:24 AM	70.3 °F	68.0 °F	92 %	East	1.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:29 AM	70.3 °F	68.0 °F	92 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:34 AM	70.2 °F	68.0 °F	92 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:39 AM	70.1 °F	68.0 °F	92 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:44 AM	70.0 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:49 AM	70.0 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:54 AM	69.9 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:59 AM	69.9 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:04 AM	69.9 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:09 AM	69.9 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:14 AM	69.9 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:19 AM	69.9 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:24 AM	70.1 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:29 AM	70.0 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:34 AM	69.9 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:39 AM	69.8 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:44 AM	69.8 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:49 AM	69.8 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:54 AM	69.9 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:59 AM	70.0 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		7:04 AM	70.0 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		7:09 AM	70.1 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
	Sunrise	6:35 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:13 PM											
		7:39 PM	75.0 °F	70.0 °F	84 %	NE	**10.1 mph**	20.2 mph	30.10 in	0.00 in	0.94 in		
		7:44 PM	74.9 °F	70.0 °F	84 %	ENE	**10.1 mph**	17.7 mph	30.10 in	0.00 in	0.94 in		
		7:49 PM	74.8 °F	70.0 °F	84 %	ENE	**12.5 mph**	19.3 mph	30.11 in	0.00 in	0.94 in		
		7:54 PM	74.8 °F	70.0 °F	84 %	ENE	**10.8 mph**	19.6 mph	30.11 in	0.00 in	0.94 in		
		7:59 PM	74.7 °F	70.0 °F	84 %	NE	**9.5 mph**	19.6 mph	30.11 in	0.00 in	0.94 in		
		8:04 PM	74.6 °F	69.8 °F	84 %	NE	**9.4 mph**	19.4 mph	30.11 in	0.00 in	0.94 in		
		8:09 PM	74.5 °F	70.0 °F	85 %	ENE	8.2 mph	18.4 mph	30.10 in	0.00 in	0.94 in		
		8:14 PM	74.4 °F	70.0 °F	85 %	ENE	8.0 mph	16.4 mph	30.10 in	0.00 in	0.94 in		
		8:19 PM	74.4 °F	69.0 °F	84 %	ENE	**9.2 mph**	0.0 mph	30.10 in	0.00 in	0.94 in		
		8:24 PM	74.4 °F	69.7 °F	85 %	NE	4.9 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		8:29 PM	74.4 °F	70.0 °F	85 %	NE	5.5 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		8:34 PM	74.3 °F	70.0 °F	85 %	NE	4.6 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		8:39 PM	74.1 °F	69.9 °F	86 %	NNE	3.7 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		8:44 PM	73.9 °F	70.0 °F	86 %	NE	3.6 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		8:49 PM	73.8 °F	69.1 °F	86 %	NE	5.8 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		8:54 PM	73.7 °F	69.0 °F	86 %	ENE	5.1 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		8:59 PM	73.5 °F	69.6 °F	87 %	NE	4.5 mph	0.0 mph	30.11 in	0.00 in	0.94 in		
		9:04 PM	73.3 °F	69.0 °F	87 %	ENE	3.9 mph	0.0 mph	30.11 in	0.00 in	0.94 in		
		9:09 PM	73.1 °F	69.0 °F	87 %	NE	4.6 mph	0.0 mph	30.12 in	0.00 in	0.94 in		
		9:14 PM	73.0 °F	69.0 °F	88 %	NNE	4.4 mph	0.0 mph	30.12 in	0.00 in	0.94 in		
		9:19 PM	72.7 °F	69.0 °F	88 %	ENE	6.1 mph	0.0 mph	30.11 in	0.00 in	0.94 in		
		9:24 PM	72.6 °F	69.0 °F	88 %	NE	5.2 mph	0.0 mph	30.11 in	0.00 in	0.94 in		
		9:29 PM	72.5 °F	69.0 °F	89 %	ENE	5.5 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		9:34 PM	72.4 °F	69.0 °F	89 %	NE	5.5 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		9:39 PM	72.3 °F	69.0 °F	89 %	ENE	4.7 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		9:44 PM	72.2 °F	69.0 °F	89 %	ENE	4.3 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		9:49 PM	72.2 °F	69.0 °F	89 %	ENE	4.4 mph	0.0 mph	30.11 in	0.00 in	0.94 in		
		9:54 PM	72.1 °F	69.0 °F	89 %	ENE	5.6 mph	0.0 mph	30.11 in	0.00 in	0.94 in		
		9:59 PM	72.2 °F	69.0 °F	89 %	East	6.4 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		10:04 PM	72.3 °F	69.0 °F	88 %	East	7.0 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		10:09 PM	72.3 °F	69.0 °F	88 %	East	6.2 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		10:14 PM	72.3 °F	69.0 °F	88 %	East	5.8 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		10:19 PM	72.3 °F	69.0 °F	88 %	ESE	5.9 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		10:24 PM	72.3 °F	69.0 °F	88 %	ESE	5.0 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		10:29 PM	72.2 °F	68.9 °F	88 %	ESE	4.5 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		10:34 PM	72.2 °F	69.0 °F	89 %	ESE	5.3 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		10:39 PM	72.1 °F	69.0 °F	89 %	ESE	5.5 mph	0.0 mph	30.10 in	0.00 in	0.94 in		
		10:44 PM	72.1 °F	69.0 °F	89 %	ESE	5.6 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		10:49 PM	72.0 °F	69.0 °F	89 %	SE	5.0 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		10:54 PM	71.9 °F	69.0 °F	89 %	SE	4.2 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		10:59 PM	71.9 °F	69.0 °F	90 %	SE	3.6 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:04 PM	71.8 °F	69.0 °F	90 %	SE	3.6 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:09 PM	71.8 °F	69.0 °F	90 %	SSE	4.0 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:14 PM	71.7 °F	69.0 °F	90 %	SSE	4.0 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:19 PM	71.6 °F	69.0 °F	90 %	SSE	3.5 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:24 PM	71.4 °F	69.0 °F	91 %	SSE	2.0 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:29 PM	71.2 °F	69.0 °F	91 %	SSE	2.4 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:34 PM	71.2 °F	69.0 °F	91 %	SSE	2.7 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:39 PM	71.1 °F	68.1 °F	91 %	South	3.2 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:44 PM	71.0 °F	68.3 °F	91 %	South	4.7 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:49 PM	70.8 °F	68.2 °F	92 %	South	4.8 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:54 PM	70.8 °F	68.0 °F	92 %	South	5.3 mph	0.0 mph	30.09 in	0.00 in	0.94 in		
		11:59 PM	70.7 °F	68.0 °F	92 %	South	4.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:04 AM	70.8 °F	68.0 °F	92 %	South	3.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:09 AM	70.8 °F	68.1 °F	92 %	South	3.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:14 AM	70.9 °F	68.8 °F	92 %	South	2.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:19 AM	70.8 °F	68.3 °F	92 %	South	2.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:24 AM	70.9 °F	68.9 °F	92 %	South	2.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:29 AM	71.0 °F	69.0 °F	92 %	SSE	1.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:34 AM	70.9 °F	69.0 °F	92 %	South	2.9 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:39 AM	70.9 °F	69.0 °F	92 %	South	2.6 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:44 AM	71.0 °F	69.0 °F	92 %	South	1.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:49 AM	71.0 °F	69.0 °F	92 %	South	0.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:54 AM	71.0 °F	69.0 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:59 AM	71.2 °F	69.0 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:04 AM	71.2 °F	69.0 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:09 AM	71.2 °F	69.0 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:14 AM	70.9 °F	68.6 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
10	5/24/2025-5/25/2025	1:19 AM	70.6 °F	68.0 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in	30-37	Yes
		1:24 AM	70.5 °F	68.0 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:29 AM	70.5 °F	68.0 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:34 AM	70.5 °F	68.0 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:39 AM	70.5 °F	68.0 °F	92 %	South	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:44 AM	70.6 °F	68.0 °F	92 %	South	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:49 AM	70.4 °F	68.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:54 AM	70.4 °F	68.0 °F	93 %	NE	3.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:59 AM	70.5 °F	68.0 °F	93 %	NNE	2.6 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:04 AM	70.5 °F	68.0 °F	93 %	NNE	3.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:09 AM	70.4 °F	68.0 °F	93 %	NE	4.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:14 AM	70.3 °F	68.0 °F	93 %	NE	3.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:19 AM	70.2 °F	68.0 °F	93 %	NE	3.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:24 AM	70.2 °F	68.0 °F	93 %	NE	3.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:29 AM	70.1 °F	68.0 °F	93 %	NE	3.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:34 AM	70.1 °F	68.0 °F	93 %	NE	3.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:39 AM	70.0 °F	68.0 °F	93 %	NNE	2.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:44 AM	69.9 °F	68.0 °F	93 %	ENE	3.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:49 AM	69.8 °F	68.0 °F	93 %	NE	2.9 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:54 AM	69.7 °F	68.0 °F	93 %	ENE	3.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:59 AM	69.6 °F	68.0 °F	93 %	ENE	2.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:04 AM	69.6 °F	68.0 °F	93 %	ENE	2.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:09 AM	69.6 °F	68.0 °F	93 %	ENE	2.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:14 AM	69.6 °F	68.0 °F	93 %	NE	2.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:19 AM	69.6 °F	68.0 °F	93 %	NE	1.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:24 AM	69.6 °F	68.0 °F	93 %	NE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:29 AM	69.5 °F	68.0 °F	93 %	NE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:34 AM	69.5 °F	67.7 °F	93 %	NE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:39 AM	69.5 °F	67.7 °F	93 %	NE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:44 AM	69.5 °F	67.6 °F	93 %	NE	0.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:49 AM	69.5 °F	67.7 °F	93 %	ENE	2.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:54 AM	69.5 °F	67.8 °F	93 %	ENE	1.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:59 AM	69.4 °F	67.4 °F	93 %	ENE	1.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:04 AM	69.5 °F	68.0 °F	93 %	ENE	2.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:09 AM	69.5 °F	67.8 °F	93 %	ENE	1.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:14 AM	69.4 °F	67.4 °F	93 %	ENE	1.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:19 AM	69.6 °F	68.0 °F	93 %	ENE	1.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:24 AM	69.5 °F	68.0 °F	93 %	ENE	1.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:29 AM	69.5 °F	68.0 °F	93 %	ENE	1.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:34 AM	69.6 °F	68.0 °F	93 %	ENE	2.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		4:39 AM	69.6 °F	68.0 °F	93 %	ENE	1.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:44 AM	69.7 °F	68.0 °F	93 %	ENE	0.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:49 AM	69.8 °F	68.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:54 AM	69.8 °F	68.0 °F	93 %	ENE	1.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:59 AM	69.7 °F	68.0 °F	93 %	ENE	0.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:04 AM	69.7 °F	68.0 °F	93 %	NE	1.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:09 AM	69.6 °F	68.0 °F	93 %	NE	1.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:14 AM	69.5 °F	68.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:19 AM	69.5 °F	67.9 °F	93 %	ENE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:24 AM	69.5 °F	67.7 °F	93 %	ENE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:29 AM	69.5 °F	68.0 °F	93 %	ENE	0.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:34 AM	69.4 °F	67.1 °F	93 %	ENE	2.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:39 AM	69.3 °F	67.0 °F	93 %	ENE	2.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:44 AM	69.3 °F	67.0 °F	93 %	ENE	2.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:49 AM	69.2 °F	67.0 °F	93 %	ENE	2.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:54 AM	69.2 °F	67.0 °F	93 %	ENE	2.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:59 AM	69.2 °F	67.0 °F	93 %	ENE	2.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:04 AM	69.2 °F	67.0 °F	93 %	ENE	2.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:09 AM	69.2 °F	67.0 °F	93 %	East	3.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:14 AM	69.3 °F	67.0 °F	93 %	East	3.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:19 AM	69.4 °F	67.1 °F	93 %	East	3.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:24 AM	69.4 °F	67.4 °F	93 %	East	3.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:29 AM	69.5 °F	68.0 °F	93 %	East	3.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:34 AM	69.6 °F	68.0 °F	93 %	East	3.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:39 AM	69.7 °F	68.0 °F	93 %	East	3.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:44 AM	69.7 °F	68.0 °F	93 %	East	3.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:49 AM	69.7 °F	68.0 °F	93 %	East	2.9 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:54 AM	69.8 °F	68.0 °F	93 %	East	2.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:59 AM	69.9 °F	68.0 °F	93 %	East	2.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		7:04 AM	70.0 °F	68.0 °F	93 %	East	2.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
	Sunrise	6:34 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:14 PM											
11	5/25/2025-5/26/2025	7:44 PM	83.7 °F	73.0 °F	70 %	East	2.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in	30-37	Yes
		7:49 PM	83.5 °F	73.0 °F	71 %	ENE	2.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		7:54 PM	83.4 °F	73.5 °F	72 %	ENE	1.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		7:59 PM	83.5 °F	73.1 °F	71 %	ENE	2.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:04 PM	83.1 °F	73.0 °F	72 %	ENE	3.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:09 PM	82.9 °F	73.0 °F	72 %	ENE	2.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:14 PM	82.6 °F	73.0 °F	73 %	NE	2.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:19 PM	82.3 °F	73.0 °F	74 %	NE	1.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:24 PM	82.1 °F	73.0 °F	74 %	NE	1.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:29 PM	82.0 °F	73.0 °F	74 %	NE	1.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		8:34 PM	81.7 °F	73.0 °F	75 %	NE	1.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:39 PM	81.5 °F	73.0 °F	76 %	NE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:44 PM	81.3 °F	73.0 °F	76 %	NE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:49 PM	81.0 °F	73.0 °F	77 %	NNE	1.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		8:54 PM	80.6 °F	73.0 °F	78 %	NNW	2.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		8:59 PM	80.4 °F	73.0 °F	78 %	North	1.8 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:04 PM	80.2 °F	73.0 °F	79 %	NNE	2.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:09 PM	80.2 °F	73.0 °F	79 %	NE	3.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:14 PM	80.0 °F	73.0 °F	79 %	NE	4.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:19 PM	79.9 °F	73.0 °F	79 %	ENE	4.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:24 PM	79.5 °F	73.0 °F	80 %	ENE	4.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:29 PM	79.3 °F	73.0 °F	81 %	ENE	4.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:34 PM	79.1 °F	73.0 °F	82 %	ENE	5.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:39 PM	78.8 °F	73.0 °F	82 %	NE	5.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:44 PM	78.6 °F	73.0 °F	82 %	NE	4.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:49 PM	78.4 °F	73.0 °F	82 %	NE	4.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:54 PM	78.3 °F	72.1 °F	82 %	NE	5.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:59 PM	78.2 °F	72.1 °F	82 %	NE	5.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:04 PM	78.1 °F	73.0 °F	83 %	ENE	5.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:09 PM	78.0 °F	73.0 °F	83 %	NE	5.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:14 PM	77.9 °F	72.1 °F	83 %	NE	4.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:19 PM	77.7 °F	72.0 °F	83 %	NE	4.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:24 PM	77.5 °F	72.5 °F	84 %	NE	3.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:29 PM	77.3 °F	72.0 °F	84 %	ENE	4.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:34 PM	77.1 °F	72.0 °F	84 %	ENE	4.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:39 PM	76.9 °F	72.0 °F	85 %	East	5.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		10:44 PM	76.7 °F	72.0 °F	86 %	East	3.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		10:49 PM	76.3 °F	72.0 °F	86 %	East	3.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		10:54 PM	76.1 °F	72.0 °F	86 %	East	2.9 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		10:59 PM	76.0 °F	72.0 °F	86 %	East	3.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		11:04 PM	75.9 °F	72.0 °F	87 %	East	3.6 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		11:09 PM	75.9 °F	72.0 °F	87 %	East	3.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		11:14 PM	75.8 °F	72.0 °F	87 %	East	3.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		11:19 PM	75.7 °F	72.0 °F	87 %	East	3.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:24 PM	75.4 °F	71.6 °F	88 %	East	4.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:29 PM	75.1 °F	71.0 °F	87 %	East	5.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:34 PM	75.1 °F	71.2 °F	87 %	East	4.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:39 PM	75.0 °F	71.0 °F	87 %	East	3.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:44 PM	74.9 °F	71.0 °F	87 %	East	4.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:49 PM	74.9 °F	71.0 °F	87 %	East	4.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:54 PM	74.8 °F	71.0 °F	87 %	East	3.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:59 PM	74.8 °F	71.0 °F	87 %	East	3.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:04 AM	74.8 °F	71.0 °F	87 %	ENE	3.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:09 AM	74.8 °F	70.8 °F	87 %	ENE	2.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:14 AM	74.9 °F	70.6 °F	86 %	ENE	2.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:19 AM	74.8 °F	70.1 °F	86 %	East	3.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:24 AM	74.5 °F	70.0 °F	86 %	ENE	3.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:29 AM	74.4 °F	70.0 °F	86 %	ENE	3.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:34 AM	74.3 °F	70.0 °F	86 %	East	3.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:39 AM	74.1 °F	70.0 °F	86 %	ESE	3.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:44 AM	74.1 °F	70.0 °F	86 %	ESE	1.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:49 AM	74.2 °F	70.0 °F	86 %	ESE	2.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:54 AM	74.2 °F	70.0 °F	85 %	ESE	2.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:59 AM	74.2 °F	70.0 °F	85 %	ESE	2.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:04 AM	74.2 °F	70.0 °F	85 %	East	3.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:09 AM	74.1 °F	69.3 °F	85 %	East	3.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:14 AM	74.0 °F	69.0 °F	85 %	ESE	4.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:19 AM	73.9 °F	69.0 °F	85 %	ESE	4.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:24 AM	74.0 °F	69.0 °F	85 %	ESE	4.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:29 AM	74.0 °F	69.0 °F	84 %	ESE	5.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:34 AM	74.0 °F	69.0 °F	84 %	ESE	5.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:39 AM	74.2 °F	69.0 °F	84 %	ESE	6.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:44 AM	74.2 °F	69.0 °F	83 %	ESE	6.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:49 AM	74.2 °F	69.0 °F	83 %	ESE	6.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:54 AM	74.1 °F	69.0 °F	83 %	ESE	4.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:59 AM	74.1 °F	69.0 °F	83 %	ESE	4.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:04 AM	74.0 °F	69.0 °F	83 %	ESE	3.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:09 AM	73.9 °F	69.0 °F	84 %	ESE	3.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:14 AM	73.8 °F	69.0 °F	84 %	SE	2.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:19 AM	73.6 °F	68.8 °F	84 %	SE	2.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:24 AM	73.4 °F	68.4 °F	84 %	SE	1.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:29 AM	73.0 °F	68.4 °F	85 %	SE	0.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:34 AM	72.6 °F	68.2 °F	86 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:39 AM	72.3 °F	68.0 °F	87 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:44 AM	72.1 °F	68.1 °F	87 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:49 AM	72.4 °F	68.3 °F	87 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:54 AM	72.6 °F	69.0 °F	87 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:59 AM	72.7 °F	69.0 °F	87 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:04 AM	72.3 °F	68.2 °F	87 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:09 AM	72.1 °F	68.0 °F	88 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:14 AM	71.8 °F	68.0 °F	88 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:19 AM	71.9 °F	68.0 °F	88 %	ESE	2.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:24 AM	72.1 °F	68.4 °F	88 %	East	1.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:29 AM	72.0 °F	68.0 °F	88 %	East	2.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:34 AM	72.1 °F	68.2 °F	88 %	East	2.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:39 AM	72.1 °F	68.1 °F	88 %	East	1.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:44 AM	72.1 °F	68.1 °F	88 %	ESE	1.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:49 AM	72.3 °F	68.2 °F	87 %	ESE	1.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:54 AM	72.3 °F	68.1 °F	87 %	ESE	0.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:59 AM	72.0 °F	68.0 °F	88 %	ESE	0.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:04 AM	72.1 °F	68.0 °F	88 %	ESE	1.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:09 AM	72.2 °F	68.5 °F	88 %	ESE	1.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:14 AM	71.8 °F	68.0 °F	88 %	ESE	0.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:19 AM	71.6 °F	68.0 °F	88 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:24 AM	71.5 °F	68.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:29 AM	71.3 °F	68.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:34 AM	71.1 °F	68.0 °F	90 %	ESE	0.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:39 AM	71.4 °F	68.2 °F	90 %	ESE	1.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:44 AM	71.4 °F	68.5 °F	90 %	ESE	2.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:49 AM	71.2 °F	68.0 °F	90 %	ESE	2.6 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:54 AM	71.2 °F	68.0 °F	90 %	East	3.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:59 AM	71.2 °F	68.0 °F	90 %	East	3.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:04 AM	71.1 °F	68.0 °F	90 %	East	3.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:09 AM	71.1 °F	68.0 °F	90 %	East	2.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:14 AM	71.2 °F	68.0 °F	90 %	East	3.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:19 AM	71.3 °F	68.0 °F	90 %	East	3.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:24 AM	71.4 °F	68.0 °F	90 %	East	1.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:29 AM	71.3 °F	68.0 °F	89 %	East	2.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:34 AM	71.4 °F	68.0 °F	89 %	East	2.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:39 AM	71.5 °F	68.0 °F	89 %	East	3.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:44 AM	71.5 °F	68.0 °F	89 %	East	3.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:49 AM	71.4 °F	68.0 °F	89 %	East	2.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:54 AM	71.3 °F	68.0 °F	89 %	East	2.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:59 AM	71.3 °F	68.0 °F	89 %	ESE	2.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:04 AM	71.3 °F	68.0 °F	89 %	ESE	2.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:09 AM	71.5 °F	68.0 °F	89 %	ESE	2.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:14 AM	71.6 °F	68.0 °F	89 %	ESE	2.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:19 AM	71.6 °F	68.0 °F	89 %	ESE	2.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:24 AM	71.6 °F	68.0 °F	89 %	ESE	2.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:29 AM	71.6 °F	68.0 °F	89 %	ESE	2.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:34 AM	71.7 °F	68.3 °F	89 %	ESE	2.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:39 AM	71.8 °F	69.0 °F	90 %	SE	2.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:44 AM	71.9 °F	69.0 °F	90 %	SE	1.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:49 AM	71.9 °F	69.0 °F	90 %	SE	2.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:54 AM	72.1 °F	69.0 °F	89 %	ESE	2.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:59 AM	72.2 °F	69.0 °F	89 %	ESE	2.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		7:04 AM	72.3 °F	69.0 °F	89 %	SE	2.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
	Sunrise	6:34 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
Second Deployment - Stations 1-2, 7-29													
	Sunset	8:16 PM											
		7:44 PM	86.3 °F	75.6 °F	70 %	SW	7.9 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		7:49 PM	86.1 °F	75.9 °F	71 %	SW	8.1 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		7:54 PM	85.9 °F	75.6 °F	71 %	SW	8.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		7:59 PM	85.7 °F	75.6 °F	72 %	SW	6.9 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		8:04 PM	85.3 °F	75.1 °F	72 %	SW	6.1 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		8:09 PM	85.0 °F	75.5 °F	73 %	WSW	6.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		8:14 PM	84.8 °F	75.2 °F	73 %	WSW	7.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		8:19 PM	84.6 °F	75.9 °F	74 %	WSW	6.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		8:24 PM	84.5 °F	75.3 °F	74 %	West	7.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		8:29 PM	84.2 °F	75.7 °F	75 %	WSW	6.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:34 PM	84.0 °F	75.0 °F	75 %	WSW	4.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:39 PM	83.8 °F	75.0 °F	75 %	WSW	4.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:44 PM	83.6 °F	75.0 °F	76 %	WSW	5.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:49 PM	83.3 °F	75.0 °F	76 %	SW	4.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:54 PM	83.1 °F	75.0 °F	77 %	SW	4.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:59 PM	82.9 °F	75.0 °F	77 %	WSW	3.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:04 PM	82.7 °F	75.0 °F	78 %	WSW	2.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:09 PM	82.7 °F	75.0 °F	78 %	WSW	2.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:14 PM	82.5 °F	75.0 °F	78 %	WSW	1.6 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:19 PM	82.5 °F	75.0 °F	78 %	WSW	1.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:24 PM	82.2 °F	75.0 °F	79 %	WSW	0.6 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:29 PM	82.1 °F	75.0 °F	79 %	WSW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:34 PM	81.6 °F	74.7 °F	79 %	WSW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		9:39 PM	80.8 °F	74.4 °F	81 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:44 PM	80.6 °F	75.0 °F	82 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:49 PM	80.7 °F	75.0 °F	82 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:54 PM	80.5 °F	75.0 °F	82 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:59 PM	80.3 °F	74.4 °F	82 %	SSE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:04 PM	79.8 °F	74.3 °F	83 %	East	2.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:09 PM	78.9 °F	73.8 °F	84 %	East	2.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:14 PM	78.4 °F	73.0 °F	84 %	ENE	2.8 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:19 PM	78.1 °F	73.0 °F	84 %	ENE	2.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:24 PM	77.9 °F	73.0 °F	84 %	East	2.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:29 PM	77.9 °F	73.0 °F	84 %	East	0.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:34 PM	77.9 °F	73.0 °F	84 %	East	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:39 PM	77.7 °F	73.0 °F	84 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:44 PM	77.6 °F	73.0 °F	85 %	East	0.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:49 PM	77.7 °F	73.0 °F	85 %	East	1.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:54 PM	77.9 °F	73.0 °F	85 %	East	0.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		10:59 PM	78.0 °F	73.0 °F	84 %	East	1.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:04 PM	77.7 °F	73.0 °F	84 %	East	1.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:09 PM	77.7 °F	73.0 °F	85 %	East	0.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:14 PM	77.8 °F	73.0 °F	85 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:19 PM	77.7 °F	73.0 °F	85 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:24 PM	77.3 °F	73.0 °F	86 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:29 PM	77.0 °F	73.0 °F	86 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:34 PM	76.8 °F	73.0 °F	87 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:39 PM	76.5 °F	72.7 °F	87 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:44 PM	76.4 °F	73.0 °F	88 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:49 PM	76.2 °F	72.6 °F	88 %	East	1.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:54 PM	76.0 °F	72.0 °F	88 %	East	1.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:57 PM	76.1 °F	72.3 °F	88 %	East	0.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:04 AM	76.1 °F	72.0 °F	87 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:09 AM	75.9 °F	72.0 °F	88 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:14 AM	75.9 °F	72.0 °F	88 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:19 AM	75.9 °F	72.0 °F	88 %	East	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:24 AM	76.0 °F	72.0 °F	88 %	ESE	0.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:29 AM	75.9 °F	72.0 °F	88 %	ESE	0.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:34 AM	76.0 °F	72.0 °F	88 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:39 AM	76.1 °F	72.2 °F	88 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:44 AM	76.1 °F	72.0 °F	87 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:49 AM	76.1 °F	72.0 °F	87 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:54 AM	76.0 °F	72.0 °F	88 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:59 AM	75.9 °F	72.0 °F	88 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:04 AM	76.0 °F	72.0 °F	88 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:09 AM	75.9 °F	72.0 °F	88 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:14 AM	75.7 °F	72.0 °F	88 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:19 AM	75.5 °F	72.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
1	5/29/2025 - 5/30/2025	1:24 AM	75.5 °F	72.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in	11-19, 23-29	Yes
		1:29 AM	75.3 °F	72.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:34 AM	75.2 °F	72.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		1:39 AM	75.4 °F	72.3 °F	90 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		1:44 AM	75.4 °F	72.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		1:49 AM	75.1 °F	72.0 °F	90 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		1:54 AM	74.9 °F	72.0 °F	90 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		1:59 AM	74.9 °F	72.0 °F	90 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		2:04 AM	74.7 °F	72.0 °F	90 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:09 AM	74.7 °F	72.0 °F	90 %	East	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:14 AM	74.6 °F	72.0 °F	90 %	East	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:19 AM	74.5 °F	71.5 °F	90 %	East	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:24 AM	74.2 °F	71.5 °F	91 %	East	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:29 AM	74.2 °F	72.0 °F	91 %	ESE	2.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:34 AM	74.3 °F	72.0 °F	91 %	ESE	2.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:39 AM	74.4 °F	72.0 °F	91 %	ESE	3.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:44 AM	74.6 °F	72.0 °F	90 %	ESE	2.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:49 AM	74.5 °F	71.8 °F	90 %	ESE	0.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:54 AM	74.3 °F	72.0 °F	91 %	ESE	1.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:59 AM	74.2 °F	71.7 °F	91 %	ESE	1.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:04 AM	74.2 °F	71.5 °F	91 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:09 AM	74.2 °F	71.9 °F	91 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:14 AM	74.1 °F	71.6 °F	91 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:19 AM	74.1 °F	71.0 °F	91 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:24 AM	73.9 °F	71.0 °F	91 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:29 AM	74.1 °F	71.2 °F	91 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:34 AM	74.1 °F	71.4 °F	91 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:39 AM	74.0 °F	71.0 °F	91 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:44 AM	73.7 °F	71.0 °F	91 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:49 AM	73.7 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:54 AM	73.7 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:59 AM	73.6 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		4:04 AM	73.5 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		4:09 AM	73.5 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:14 AM	73.3 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:19 AM	73.2 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:24 AM	73.1 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		4:29 AM	73.1 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		4:34 AM	73.0 °F	71.0 °F	93 %	ESE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		4:39 AM	72.8 °F	70.8 °F	93 %	ESE	1.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		4:44 AM	72.7 °F	70.8 °F	93 %	ESE	0.9 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		4:49 AM	72.8 °F	71.0 °F	93 %	ESE	0.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		4:54 AM	72.6 °F	70.8 °F	93 %	ESE	1.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:59 AM	72.5 °F	70.0 °F	93 %	ESE	1.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:04 AM	72.4 °F	70.0 °F	93 %	ESE	1.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:09 AM	72.4 °F	70.0 °F	93 %	ESE	2.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:14 AM	72.4 °F	70.0 °F	93 %	ESE	1.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:19 AM	72.4 °F	70.0 °F	93 %	ESE	1.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:24 AM	72.5 °F	70.1 °F	93 %	ESE	1.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:29 AM	72.4 °F	70.0 °F	93 %	ESE	0.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:34 AM	72.3 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:39 AM	72.2 °F	70.0 °F	93 %	ESE	0.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:44 AM	72.3 °F	70.0 °F	93 %	ESE	0.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:49 AM	72.4 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:54 AM	72.2 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		5:59 AM	72.1 °F	70.0 °F	93 %	ESE	0.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:04 AM	72.1 °F	70.0 °F	93 %	ESE	1.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:09 AM	72.2 °F	70.0 °F	93 %	SE	1.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:14 AM	72.2 °F	70.0 °F	93 %	SSE	2.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:19 AM	72.2 °F	70.0 °F	93 %	SSE	2.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:24 AM	72.2 °F	70.0 °F	93 %	SSE	3.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:29 AM	72.2 °F	70.0 °F	93 %	SSE	1.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:34 AM	72.2 °F	70.0 °F	93 %	South	0.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:39 AM	72.1 °F	70.0 °F	93 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:44 AM	72.1 °F	70.0 °F	93 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:49 AM	72.1 °F	70.0 °F	93 %	South	0.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:54 AM	72.1 °F	70.0 °F	93 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:59 AM	72.1 °F	70.0 °F	93 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:04 AM	72.1 °F	70.0 °F	94 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
	Sunrise	6:33 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:16 PM											
		7:44 PM	83.3 °F	73.0 °F	72 %	WSW	5.5 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		7:49 PM	83.2 °F	73.9 °F	73 %	WSW	5.5 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		7:54 PM	82.9 °F	74.0 °F	75 %	WSW	5.2 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		7:59 PM	82.7 °F	74.0 °F	76 %	WSW	6.5 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:04 PM	82.5 °F	75.0 °F	77 %	WSW	7.0 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		8:09 PM	82.4 °F	75.0 °F	78 %	WSW	5.9 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		8:14 PM	82.1 °F	75.0 °F	79 %	WSW	4.6 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		8:19 PM	82.0 °F	75.0 °F	79 %	West	4.5 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:24 PM	81.9 °F	75.0 °F	80 %	West	5.4 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:29 PM	81.8 °F	75.0 °F	80 %	West	4.6 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:34 PM	81.6 °F	75.0 °F	81 %	West	5.1 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:39 PM	81.3 °F	75.0 °F	82 %	WSW	6.6 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:44 PM	81.2 °F	75.0 °F	82 %	West	5.5 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:49 PM	81.2 °F	75.0 °F	82 %	West	4.9 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		8:54 PM	81.2 °F	75.0 °F	82 %	WNW	4.8 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		8:59 PM	81.1 °F	75.2 °F	82 %	WNW	4.5 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:04 PM	81.1 °F	75.6 °F	83 %	West	4.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:09 PM	80.9 °F	75.0 °F	83 %	West	5.1 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:14 PM	80.7 °F	75.0 °F	83 %	West	5.1 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:19 PM	80.6 °F	75.0 °F	84 %	West	4.7 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		9:24 PM	80.5 °F	75.0 °F	84 %	West	4.6 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:29 PM	80.5 °F	75.0 °F	84 %	West	5.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:34 PM	80.3 °F	75.2 °F	85 %	WSW	4.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:39 PM	80.2 °F	75.0 °F	85 %	West	6.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:44 PM	80.1 °F	75.0 °F	85 %	West	7.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:49 PM	80.1 °F	75.0 °F	85 %	WSW	6.3 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:54 PM	80.0 °F	75.0 °F	85 %	WSW	6.2 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		9:59 PM	80.0 °F	75.6 °F	86 %	WSW	7.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:04 PM	79.9 °F	75.0 °F	86 %	WSW	6.5 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:09 PM	79.8 °F	75.0 °F	86 %	WSW	4.7 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:14 PM	79.7 °F	75.0 °F	86 %	SW	4.5 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		10:19 PM	79.7 °F	75.1 °F	86 %	WSW	5.2 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:24 PM	79.7 °F	75.3 °F	86 %	WSW	5.5 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:29 PM	79.7 °F	75.5 °F	87 %	West	6.6 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:34 PM	79.7 °F	75.8 °F	87 %	West	7.5 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:39 PM	79.6 °F	75.0 °F	86 %	West	8.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:44 PM	79.7 °F	75.0 °F	85 %	West	8.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:49 PM	79.8 °F	74.5 °F	84 %	WSW	7.7 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:54 PM	79.7 °F	74.0 °F	83 %	WSW	8.5 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		10:59 PM	79.5 °F	74.0 °F	83 %	West	7.7 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:04 PM	79.5 °F	74.0 °F	83 %	WSW	9.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		11:09 PM	79.4 °F	74.0 °F	83 %	WSW	**10.1 mph**	0.0 mph	29.94 in	0.00 in	0.00 in		
		11:14 PM	79.3 °F	74.0 °F	84 %	West	**10.0 mph**	0.0 mph	29.94 in	0.00 in	0.00 in		
		11:19 PM	79.1 °F	74.0 °F	84 %	West	8.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		11:24 PM	78.8 °F	74.0 °F	84 %	West	7.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		11:29 PM	78.5 °F	74.0 °F	85 %	West	6.7 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		11:34 PM	78.4 °F	73.4 °F	84 %	WSW	6.4 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		11:39 PM	78.2 °F	73.0 °F	84 %	West	5.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		11:44 PM	78.1 °F	72.2 °F	82 %	WSW	6.9 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		11:49 PM	77.9 °F	70.9 °F	79 %	WSW	8.1 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		11:54 PM	77.8 °F	70.0 °F	77 %	WSW	5.4 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		11:59 PM	77.5 °F	70.0 °F	77 %	WSW	4.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		12:04 AM	77.0 °F	70.0 °F	79 %	SW	5.7 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		12:09 AM	76.3 °F	70.0 °F	80 %	SW	5.5 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		12:14 AM	76.1 °F	69.7 °F	80 %	SW	4.6 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		12:19 AM	75.9 °F	69.0 °F	80 %	SW	3.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		12:24 AM	75.6 °F	69.6 °F	81 %	SSW	2.9 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		12:29 AM	75.5 °F	70.0 °F	82 %	SSW	3.3 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		12:34 AM	75.7 °F	70.0 °F	81 %	SW	3.7 mph	0.0 mph	29.93 in	0.00 in	0.00 in		
		12:39 AM	75.8 °F	70.0 °F	81 %	SW	3.8 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		12:44 AM	75.6 °F	70.0 °F	82 %	WSW	3.9 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		12:49 AM	75.3 °F	70.0 °F	83 %	WSW	3.9 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		12:54 AM	75.3 °F	70.0 °F	83 %	WSW	3.0 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		12:59 AM	75.2 °F	70.0 °F	83 %	SW	3.1 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		1:04 AM	75.0 °F	70.0 °F	84 %	SW	3.2 mph	0.0 mph	29.92 in	0.00 in	0.00 in		
		1:09 AM	74.9 °F	70.0 °F	84 %	SW	3.3 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		1:14 AM	74.8 °F	70.0 °F	85 %	SSW	4.3 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		1:19 AM	74.7 °F	70.0 °F	85 %	SSW	4.8 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
2	5/30/2025 - 5/31/2025	1:24 AM	74.6 °F	70.0 °F	85 %	SSW	2.7 mph	0.0 mph	29.91 in	0.00 in	0.00 in	1-2, 7-19, 23-29	Yes
		1:29 AM	74.3 °F	70.0 °F	86 %	SSW	2.6 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		1:34 AM	74.2 °F	70.0 °F	87 %	SSW	3.7 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		1:39 AM	74.2 °F	70.0 °F	87 %	SW	4.1 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		1:44 AM	74.2 °F	70.0 °F	87 %	SW	3.6 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		1:49 AM	74.3 °F	70.3 °F	87 %	SW	4.8 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		1:54 AM	74.2 °F	70.6 °F	88 %	SSW	3.8 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		1:59 AM	74.2 °F	71.0 °F	88 %	SSW	3.9 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		2:04 AM	74.0 °F	70.1 °F	88 %	SW	1.9 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:09 AM	73.7 °F	70.0 °F	88 %	SW	2.1 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:14 AM	73.8 °F	70.0 °F	89 %	SW	2.9 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:18 AM	73.7 °F	70.0 °F	89 %	SW	3.6 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:24 AM	73.7 °F	70.0 °F	89 %	SW	3.1 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		2:29 AM	73.8 °F	70.4 °F	89 %	SW	2.9 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:34 AM	74.1 °F	71.0 °F	90 %	SSW	3.6 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		2:39 AM	74.4 °F	71.4 °F	90 %	South	5.1 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		2:44 AM	74.5 °F	71.4 °F	89 %	SSW	3.1 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		2:49 AM	74.6 °F	72.0 °F	90 %	WSW	3.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		2:54 AM	74.7 °F	72.0 °F	90 %	West	2.8 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		2:59 AM	74.9 °F	72.0 °F	90 %	WSW	2.6 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:04 AM	75.3 °F	72.2 °F	90 %	WSW	2.3 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:09 AM	75.7 °F	73.0 °F	90 %	WSW	3.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:14 AM	76.1 °F	73.0 °F	90 %	SW	4.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:19 AM	76.3 °F	73.0 °F	90 %	SW	4.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:24 AM	76.3 °F	73.0 °F	89 %	WSW	4.4 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:29 AM	76.4 °F	73.1 °F	90 %	West	5.6 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:34 AM	76.4 °F	73.0 °F	89 %	WSW	4.9 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:39 AM	76.3 °F	73.0 °F	90 %	WSW	5.4 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:44 AM	76.2 °F	73.0 °F	89 %	SW	4.6 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:49 AM	75.9 °F	73.0 °F	90 %	SW	4.5 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		3:54 AM	75.9 °F	73.0 °F	90 %	SW	4.8 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		3:59 AM	75.9 °F	73.0 °F	90 %	SW	4.4 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		4:04 AM	75.9 °F	73.0 °F	91 %	WSW	3.2 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		4:09 AM	76.1 °F	73.1 °F	91 %	WSW	4.7 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:14 AM	76.2 °F	73.7 °F	91 %	WSW	4.9 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:19 AM	76.3 °F	73.6 °F	91 %	WSW	5.1 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:24 AM	76.3 °F	73.7 °F	91 %	WSW	4.7 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:29 AM	76.2 °F	73.8 °F	91 %	WSW	4.8 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:34 AM	76.2 °F	74.0 °F	91 %	WSW	4.3 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:39 AM	76.2 °F	73.6 °F	91 %	SW	4.2 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:44 AM	76.1 °F	73.0 °F	91 %	SW	4.3 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:49 AM	75.8 °F	73.0 °F	91 %	SW	4.8 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:54 AM	75.8 °F	73.0 °F	92 %	SW	4.6 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		4:59 AM	75.9 °F	73.9 °F	92 %	SSW	3.9 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		5:04 AM	76.0 °F	74.0 °F	92 %	SW	3.5 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		5:09 AM	76.0 °F	74.0 °F	92 %	SW	4.5 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		5:14 AM	76.0 °F	74.0 °F	92 %	SW	5.0 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		5:19 AM	76.2 °F	74.0 °F	92 %	SW	4.9 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		5:24 AM	76.4 °F	74.0 °F	92 %	SW	4.9 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		5:29 AM	76.3 °F	74.0 °F	92 %	SW	4.4 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		5:34 AM	76.3 °F	74.0 °F	92 %	SW	4.6 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		5:39 AM	76.3 °F	74.0 °F	92 %	SW	4.3 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		5:44 AM	76.5 °F	74.0 °F	92 %	SW	3.6 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		5:49 AM	76.6 °F	74.0 °F	92 %	SW	3.0 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		5:54 AM	76.7 °F	74.0 °F	92 %	SW	3.1 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		5:59 AM	76.7 °F	74.0 °F	92 %	SSW	3.5 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		6:04 AM	76.7 °F	74.0 °F	92 %	SSW	3.2 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		6:09 AM	76.7 °F	74.0 °F	92 %	SSW	3.1 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		6:14 AM	76.7 °F	74.0 °F	92 %	SSW	2.5 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		6:19 AM	76.6 °F	74.0 °F	92 %	SSW	1.8 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		6:24 AM	76.7 °F	74.0 °F	92 %	SSW	2.5 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		6:29 AM	76.6 °F	74.0 °F	92 %	SSW	3.0 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		6:34 AM	76.5 °F	74.0 °F	92 %	SSW	3.7 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
		6:39 AM	76.4 °F	74.0 °F	92 %	SW	3.9 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		6:44 AM	76.6 °F	74.0 °F	92 %	WSW	3.6 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		6:49 AM	76.8 °F	74.3 °F	92 %	SW	3.3 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		6:54 AM	76.9 °F	74.8 °F	92 %	SW	3.5 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		6:59 AM	76.7 °F	74.0 °F	92 %	SSW	4.0 mph	0.0 mph	29.87 in	0.00 in	0.00 in		
		7:04 AM	76.7 °F	74.0 °F	92 %	SW	4.7 mph	0.0 mph	29.86 in	0.00 in	0.00 in		
	Sunrise	6:33 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:17 PM											
		7:44 PM	80.0 °F	74.0 °F	81 %	WSW	5.8 mph	0.0 mph	29.86 in	0.00 in	0.25 in		
		7:49 PM	79.9 °F	74.0 °F	81 %	WSW	5.7 mph	0.0 mph	29.86 in	0.00 in	0.25 in		
		7:54 PM	79.9 °F	74.0 °F	81 %	WSW	5.5 mph	0.0 mph	29.86 in	0.00 in	0.25 in		
		7:59 PM	79.7 °F	74.0 °F	82 %	WSW	4.1 mph	0.0 mph	29.86 in	0.00 in	0.25 in		
		8:04 PM	79.5 °F	74.0 °F	82 %	WSW	4.8 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:09 PM	79.3 °F	74.0 °F	83 %	WSW	4.5 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:14 PM	79.2 °F	74.0 °F	83 %	SW	4.5 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:19 PM	78.8 °F	73.7 °F	84 %	SSW	4.6 mph	0.0 mph	29.86 in	0.00 in	0.25 in		
		8:24 PM	78.4 °F	73.1 °F	84 %	SW	5.1 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:29 PM	78.2 °F	73.0 °F	85 %	WSW	4.3 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:34 PM	78.2 °F	73.0 °F	85 %	WSW	3.5 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:39 PM	78.1 °F	73.0 °F	85 %	SW	3.9 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:44 PM	78.0 °F	73.0 °F	85 %	SW	3.6 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:49 PM	78.0 °F	73.0 °F	85 %	SW	2.7 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:54 PM	77.9 °F	73.0 °F	85 %	SW	2.1 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		8:59 PM	77.8 °F	73.0 °F	85 %	SW	2.2 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		9:04 PM	77.6 °F	73.0 °F	86 %	SW	2.1 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		9:09 PM	77.5 °F	73.0 °F	86 %	SW	2.3 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		9:14 PM	77.3 °F	73.0 °F	86 %	SW	1.7 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		9:19 PM	77.2 °F	73.0 °F	86 %	SW	2.3 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		9:24 PM	77.1 °F	73.0 °F	87 %	SW	1.3 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		9:29 PM	76.9 °F	73.0 °F	87 %	SW	0.0 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		9:34 PM	76.6 °F	72.8 °F	87 %	SW	0.0 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		9:39 PM	76.1 °F	72.3 °F	88 %	SW	0.0 mph	0.0 mph	29.87 in	0.00 in	0.25 in		
		9:44 PM	76.0 °F	73.0 °F	89 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.25 in		
		9:49 PM	75.8 °F	72.3 °F	89 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.25 in		
		9:54 PM	75.6 °F	72.4 °F	89 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.25 in		
		9:59 PM	75.6 °F	73.0 °F	90 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.25 in		
		10:04 PM	75.5 °F	72.6 °F	90 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.25 in		
		10:09 PM	75.3 °F	72.0 °F	90 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.25 in		
		10:14 PM	75.2 °F	72.0 °F	90 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.25 in		
		10:19 PM	75.1 °F	72.1 °F	91 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.25 in		
		10:24 PM	75.3 °F	73.0 °F	91 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.25 in		
		10:29 PM	75.3 °F	72.9 °F	91 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.25 in		
		10:34 PM	75.2 °F	72.0 °F	90 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.25 in		
		10:39 PM	75.2 °F	72.0 °F	90 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.25 in		
		10:44 PM	75.2 °F	72.0 °F	90 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.25 in		
		10:49 PM	75.1 °F	72.3 °F	91 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.25 in		
		10:54 PM	75.3 °F	73.0 °F	91 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.25 in		
		10:59 PM	75.3 °F	73.0 °F	91 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.25 in		
		11:04 PM	75.2 °F	73.0 °F	91 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.25 in		
		11:09 PM	75.0 °F	72.0 °F	91 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.25 in		
		11:14 PM	74.7 °F	72.0 °F	91 %	SW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.25 in		
		11:19 PM	74.5 °F	72.0 °F	91 %	SW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.25 in		
		11:24 PM	74.3 °F	72.0 °F	92 %	SW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.25 in		
		11:29 PM	74.2 °F	72.0 °F	92 %	SW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.25 in		
		11:34 PM	74.2 °F	72.0 °F	92 %	SW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.25 in		
		11:39 PM	74.3 °F	72.0 °F	92 %	SW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.25 in		
		11:44 PM	74.3 °F	72.0 °F	92 %	SW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.25 in		
		11:49 PM	74.3 °F	72.0 °F	92 %	SW	0.0 mph	0.0 mph	29.91 in	0.00 in	0.25 in		
		11:54 PM	74.2 °F	72.0 °F	92 %	SW	0.4 mph	0.0 mph	29.91 in	0.00 in	0.25 in		
		11:59 PM	74.4 °F	72.0 °F	92 %	SW	2.1 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		12:04 AM	74.5 °F	72.0 °F	92 %	SW	1.6 mph	0.0 mph	29.91 in	0.00 in	0.00 in		
		12:09 AM	74.7 °F	72.0 °F	92 %	SW	2.1 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:14 AM	74.9 °F	72.6 °F	92 %	SW	2.2 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:19 AM	74.8 °F	72.0 °F	92 %	SW	1.7 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:24 AM	74.5 °F	72.0 °F	92 %	SW	1.1 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:29 AM	74.3 °F	72.0 °F	92 %	SW	0.7 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:34 AM	74.4 °F	72.0 °F	92 %	SW	0.5 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:39 AM	74.2 °F	72.0 °F	92 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:44 AM	74.0 °F	72.0 °F	92 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:49 AM	74.0 °F	72.0 °F	92 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:54 AM	74.1 °F	72.0 °F	93 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		12:59 AM	74.1 °F	72.0 °F	93 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		1:04 AM	74.3 °F	72.0 °F	93 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		1:09 AM	74.1 °F	72.0 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		1:14 AM	73.7 °F	71.3 °F	92 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		1:19 AM	73.4 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
3	5/31/2025 - 6/1/2025	1:24 AM	73.3 °F	71.0 °F	93 %	SW	1.5 mph	0.0 mph	29.90 in	0.00 in	0.00 in	1-2, 7-19, 23-29	Yes
		1:29 AM	73.4 °F	71.0 °F	93 %	SW	0.8 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		1:34 AM	73.6 °F	71.4 °F	93 %	SW	0.0 mph	0.0 mph	29.90 in	0.00 in	0.00 in		
		1:39 AM	73.7 °F	72.0 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		1:44 AM	73.6 °F	71.9 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		1:49 AM	73.5 °F	71.2 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		1:54 AM	73.6 °F	71.3 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		1:59 AM	73.6 °F	72.0 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:04 AM	73.8 °F	72.0 °F	94 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:09 AM	73.8 °F	72.0 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:14 AM	73.7 °F	72.0 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:19 AM	73.7 °F	72.0 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:24 AM	73.6 °F	71.9 °F	93 %	SW	0.1 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:29 AM	73.6 °F	71.7 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:34 AM	73.4 °F	71.4 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:39 AM	73.3 °F	71.4 °F	93 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:44 AM	73.3 °F	71.6 °F	94 %	SW	0.5 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		2:49 AM	73.1 °F	71.0 °F	94 %	SW	1.8 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		2:54 AM	73.1 °F	71.0 °F	94 %	SW	0.7 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		2:59 AM	73.2 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:04 AM	73.1 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		3:09 AM	73.2 °F	71.3 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:14 AM	73.2 °F	71.2 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:19 AM	73.0 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:24 AM	73.1 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:29 AM	73.0 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:34 AM	73.1 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:39 AM	73.0 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:44 AM	73.0 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:49 AM	73.0 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:54 AM	73.0 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		3:59 AM	72.8 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:04 AM	72.9 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:09 AM	72.9 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:14 AM	72.8 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:19 AM	72.7 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:24 AM	72.8 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:29 AM	72.7 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:34 AM	72.6 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:39 AM	72.7 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:44 AM	72.8 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:49 AM	72.7 °F	71.0 °F	94 %	SE	1.5 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:54 AM	72.7 °F	71.0 °F	94 %	ESE	2.1 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		4:59 AM	72.9 °F	71.5 °F	95 %	NE	2.2 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		5:04 AM	73.1 °F	72.0 °F	95 %	North	2.8 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		5:09 AM	73.1 °F	72.0 °F	95 %	-	2.7 mph	0.0 mph	29.89 in	0.00 in	0.00 in		
		5:14 AM	72.6 °F	71.0 °F	94 %	NNE	2.3 mph	0.0 mph	29.88 in	0.00 in	0.00 in		
		5:19 AM	72.5 °F	71.0 °F	94 %	ENE	0.8 mph	0.0 mph	29.88 in	0.01 in	0.01 in		
		5:24 AM	72.3 °F	70.4 °F	94 %	NE	4.0 mph	0.0 mph	29.88 in	0.01 in	0.01 in		
		5:29 AM	72.0 °F	70.0 °F	94 %	NW	6.5 mph	0.0 mph	29.90 in	0.01 in	0.01 in		
		5:34 AM	71.7 °F	70.0 °F	93 %	NW	7.2 mph	0.0 mph	29.90 in	0.07 in	0.07 in		
		5:39 AM	71.2 °F	69.0 °F	93 %	NW	3.3 mph	0.0 mph	29.89 in	0.07 in	0.07 in		
		5:44 AM	71.0 °F	69.0 °F	94 %	NNW	2.0 mph	0.0 mph	29.89 in	0.07 in	0.07 in		
		5:49 AM	70.8 °F	69.0 °F	94 %	NNW	1.9 mph	0.0 mph	29.89 in	0.07 in	0.07 in		
		5:54 AM	70.8 °F	69.0 °F	94 %	NW	5.7 mph	0.0 mph	29.90 in	0.07 in	0.07 in		
		5:59 AM	70.8 °F	69.0 °F	94 %	NNW	7.3 mph	0.0 mph	29.90 in	0.08 in	0.08 in		
		6:04 AM	70.3 °F	69.0 °F	94 %	NNW	7.9 mph	0.0 mph	29.89 in	0.08 in	0.08 in		
		6:09 AM	70.3 °F	69.0 °F	94 %	NNW	5.9 mph	0.0 mph	29.90 in	0.10 in	0.10 in		
		6:14 AM	70.4 °F	69.0 °F	94 %	NNW	4.3 mph	0.0 mph	29.90 in	0.18 in	0.18 in		
		6:19 AM	70.5 °F	69.0 °F	94 %	NNW	3.9 mph	0.0 mph	29.91 in	0.23 in	0.24 in		
		6:24 AM	70.6 °F	69.0 °F	94 %	West	6.9 mph	0.0 mph	29.92 in	0.45 in	0.46 in		
		6:29 AM	70.7 °F	69.0 °F	94 %	NNW	1.7 mph	0.0 mph	29.91 in	0.51 in	0.52 in		
		6:34 AM	70.8 °F	69.0 °F	94 %	East	0.0 mph	0.0 mph	29.91 in	0.51 in	0.55 in		
		6:39 AM	70.7 °F	69.0 °F	94 %	ESE	0.9 mph	0.0 mph	29.91 in	0.51 in	0.58 in		
		6:44 AM	70.7 °F	69.0 °F	94 %	ESE	1.9 mph	0.0 mph	29.92 in	0.51 in	0.58 in		
		6:49 AM	70.7 °F	69.0 °F	94 %	East	2.0 mph	0.0 mph	29.92 in	0.52 in	0.59 in		
		6:54 AM	70.6 °F	69.0 °F	94 %	ESE	3.4 mph	0.0 mph	29.92 in	0.52 in	0.59 in		
		6:59 AM	70.6 °F	69.0 °F	95 %	ESE	4.2 mph	0.0 mph	29.92 in	0.52 in	0.59 in		
		7:04 AM	70.6 °F	69.0 °F	95 %	East	4.1 mph	0.0 mph	29.92 in	0.51 in	0.59 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:17 PM											
		7:44 PM	82.5 °F	74.9 °F	77 %	SW	8.3 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		7:49 PM	82.3 °F	74.9 °F	78 %	SW	8.4 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		7:54 PM	82.0 °F	75.0 °F	78 %	WSW	7.4 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		7:59 PM	81.7 °F	75.0 °F	79 %	WSW	6.3 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:04 PM	81.5 °F	75.0 °F	80 %	WSW	6.3 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:09 PM	81.3 °F	74.9 °F	80 %	WSW	6.8 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:14 PM	81.1 °F	74.2 °F	80 %	WSW	6.2 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:19 PM	80.8 °F	74.0 °F	80 %	WSW	5.5 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:24 PM	80.5 °F	74.0 °F	81 %	SW	4.5 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:29 PM	80.2 °F	74.0 °F	81 %	SW	4.3 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:34 PM	79.9 °F	74.0 °F	82 %	SW	4.5 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:39 PM	79.8 °F	74.0 °F	82 %	WSW	5.0 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:44 PM	79.7 °F	74.0 °F	82 %	WSW	5.7 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:49 PM	79.8 °F	74.0 °F	82 %	West	6.0 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:54 PM	79.8 °F	74.0 °F	82 %	West	5.8 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		8:59 PM	79.6 °F	74.0 °F	82 %	West	4.5 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		9:04 PM	79.4 °F	73.9 °F	82 %	WSW	3.9 mph	0.0 mph	29.92 in	0.00 in	0.76 in		
		9:09 PM	79.3 °F	73.8 °F	83 %	WSW	3.3 mph	0.0 mph	29.93 in	0.00 in	0.76 in		
		9:14 PM	79.2 °F	74.0 °F	83 %	WSW	2.7 mph	0.0 mph	29.93 in	0.00 in	0.76 in		
		9:19 PM	79.1 °F	74.0 °F	83 %	WSW	2.8 mph	0.0 mph	29.93 in	0.00 in	0.76 in		
		9:24 PM	79.0 °F	73.7 °F	83 %	WSW	3.0 mph	0.0 mph	29.93 in	0.00 in	0.76 in		
		9:29 PM	78.8 °F	73.6 °F	84 %	WSW	2.8 mph	0.0 mph	29.93 in	0.00 in	0.76 in		
		9:34 PM	78.5 °F	73.1 °F	84 %	WSW	2.1 mph	0.0 mph	29.93 in	0.00 in	0.76 in		
		9:39 PM	78.5 °F	73.7 °F	85 %	WSW	2.6 mph	0.0 mph	29.94 in	0.00 in	0.76 in		
		9:44 PM	78.3 °F	73.8 °F	85 %	WSW	3.0 mph	0.0 mph	29.94 in	0.00 in	0.76 in		
		9:49 PM	78.2 °F	73.0 °F	85 %	WSW	2.6 mph	0.0 mph	29.94 in	0.00 in	0.76 in		
		9:54 PM	78.1 °F	73.4 °F	85 %	WSW	2.3 mph	0.0 mph	29.94 in	0.00 in	0.76 in		
		9:59 PM	77.9 °F	73.8 °F	86 %	WSW	2.3 mph	0.0 mph	29.94 in	0.00 in	0.76 in		
		10:04 PM	77.7 °F	73.1 °F	86 %	WSW	1.5 mph	0.0 mph	29.94 in	0.00 in	0.76 in		
		10:09 PM	77.6 °F	74.0 °F	87 %	WSW	1.4 mph	0.0 mph	29.94 in	0.00 in	0.76 in		
		10:14 PM	77.6 °F	73.7 °F	87 %	WSW	1.8 mph	0.0 mph	29.94 in	0.00 in	0.76 in		
		10:19 PM	77.5 °F	73.1 °F	87 %	WSW	2.3 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		10:24 PM	77.3 °F	73.4 °F	88 %	WSW	2.6 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		10:29 PM	77.1 °F	73.2 °F	88 %	WSW	3.1 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		10:34 PM	77.0 °F	73.0 °F	88 %	WSW	2.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		10:39 PM	76.9 °F	73.7 °F	89 %	WSW	1.8 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		10:44 PM	76.9 °F	74.0 °F	89 %	WSW	1.6 mph	0.0 mph	29.96 in	0.00 in	0.76 in		
		10:49 PM	76.9 °F	74.0 °F	89 %	WSW	1.4 mph	0.0 mph	29.96 in	0.00 in	0.76 in		
		10:54 PM	76.9 °F	74.0 °F	89 %	WSW	0.7 mph	0.0 mph	29.96 in	0.00 in	0.76 in		
		10:59 PM	76.9 °F	74.0 °F	89 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:04 PM	76.7 °F	73.2 °F	89 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:09 PM	76.6 °F	73.0 °F	89 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:14 PM	76.6 °F	73.1 °F	89 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:19 PM	76.5 °F	73.5 °F	90 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:24 PM	76.2 °F	73.0 °F	90 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:29 PM	76.1 °F	73.0 °F	90 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:34 PM	76.3 °F	73.2 °F	90 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:39 PM	76.2 °F	73.0 °F	90 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:44 PM	76.1 °F	73.2 °F	90 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:49 PM	76.0 °F	73.0 °F	90 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:54 PM	75.8 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.76 in		
		11:59 PM	75.8 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:04 AM	75.6 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:09 AM	75.6 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:14 AM	75.6 °F	73.0 °F	91 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:19 AM	75.2 °F	72.6 °F	91 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:24 AM	75.1 °F	72.8 °F	92 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:29 AM	74.9 °F	72.5 °F	92 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:34 AM	74.6 °F	72.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:39 AM	74.7 °F	72.0 °F	92 %	WSW	0.6 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:44 AM	74.7 °F	72.0 °F	92 %	WSW	0.4 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:49 AM	74.7 °F	72.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:54 AM	74.5 °F	72.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		12:59 AM	74.3 °F	72.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:04 AM	74.3 °F	72.0 °F	92 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:09 AM	74.5 °F	72.0 °F	93 %	WSW	0.5 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:14 AM	74.4 °F	72.0 °F	93 %	WSW	0.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:19 AM	74.4 °F	72.0 °F	93 %	WSW	0.2 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
4	6/1/2025 - 6/2/2025	1:24 AM	74.4 °F	72.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in	1-2, 7-19, 23-29	Yes
		1:29 AM	74.4 °F	72.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:34 AM	74.4 °F	72.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		1:39 AM	74.5 °F	72.1 °F	93 %	WSW	1.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		1:44 AM	74.6 °F	72.9 °F	93 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:49 AM	74.6 °F	73.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		1:54 AM	74.6 °F	73.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		1:59 AM	74.7 °F	73.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:04 AM	74.8 °F	73.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:09 AM	74.9 °F	73.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:14 AM	74.9 °F	73.0 °F	93 %	WSW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:19 AM	75.0 °F	73.0 °F	94 %	SSE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:24 AM	75.1 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:29 AM	75.1 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:34 AM	75.0 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:39 AM	75.1 °F	73.1 °F	94 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:44 AM	75.3 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:49 AM	75.3 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:54 AM	75.3 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		2:59 AM	75.1 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:04 AM	75.4 °F	73.4 °F	93 %	SSE	2.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:09 AM	75.3 °F	73.0 °F	93 %	South	1.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:14 AM	75.5 °F	73.0 °F	93 %	SE	1.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:19 AM	75.3 °F	73.0 °F	93 %	SE	2.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:24 AM	75.3 °F	73.0 °F	93 %	SE	2.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:29 AM	75.2 °F	73.0 °F	93 %	SE	1.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:34 AM	75.3 °F	73.0 °F	93 %	SE	1.1 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:39 AM	75.3 °F	73.0 °F	93 %	SE	1.7 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:44 AM	75.3 °F	73.0 °F	93 %	SE	1.7 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:49 AM	75.3 °F	73.0 °F	93 %	SE	1.9 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:54 AM	75.3 °F	73.0 °F	93 %	SE	1.5 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:59 AM	75.3 °F	73.0 °F	93 %	SE	0.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:04 AM	75.3 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:09 AM	75.4 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:14 AM	75.3 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:19 AM	75.3 °F	73.7 °F	94 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:24 AM	75.4 °F	74.0 °F	94 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:29 AM	75.5 °F	74.0 °F	94 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:34 AM	75.5 °F	74.0 °F	94 %	SE	0.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:38 AM	75.5 °F	74.0 °F	94 %	SE	0.0 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		4:44 AM	75.2 °F	73.5 °F	94 %	SSW	2.9 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		4:49 AM	75.1 °F	73.0 °F	94 %	SW	5.5 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:54 AM	75.3 °F	73.7 °F	94 %	SSW	7.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:59 AM	75.2 °F	73.4 °F	94 %	SSW	10.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:04 AM	75.0 °F	72.7 °F	93 %	SSW	12.2 mph	3.5 mph	29.96 in	0.00 in	0.00 in		
		5:09 AM	74.4 °F	71.4 °F	91 %	SSW	14.4 mph	10.4 mph	29.96 in	0.00 in	0.00 in		
		5:14 AM	73.7 °F	70.6 °F	90 %	SSW	14.0 mph	20.7 mph	29.96 in	0.00 in	0.00 in		
		5:19 AM	73.8 °F	69.9 °F	87 %	SSW	13.3 mph	16.6 mph	29.96 in	0.00 in	0.00 in		
		5:24 AM	73.4 °F	69.0 °F	86 %	SW	11.4 mph	11.7 mph	29.95 in	0.00 in	0.00 in		
		5:29 AM	73.3 °F	68.9 °F	85 %	SSW	9.6 mph	7.8 mph	29.95 in	0.00 in	0.00 in		
		5:34 AM	72.9 °F	68.8 °F	86 %	SW	10.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:39 AM	73.0 °F	69.0 °F	87 %	SSW	11.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:44 AM	73.1 °F	69.5 °F	88 %	SSW	9.9 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:49 AM	73.4 °F	70.0 °F	88 %	SSW	5.9 mph	3.6 mph	29.95 in	0.00 in	0.00 in		
		5:54 AM	73.2 °F	69.9 °F	88 %	SW	4.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:59 AM	73.2 °F	69.9 °F	88 %	SW	3.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:04 AM	73.2 °F	69.8 °F	88 %	South	4.7 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		6:09 AM	72.8 °F	69.6 °F	89 %	South	4.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:14 AM	72.8 °F	69.8 °F	90 %	South	2.9 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		6:19 AM	72.8 °F	70.0 °F	90 %	SSW	1.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		6:24 AM	72.7 °F	70.0 °F	90 %	WSW	1.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:29 AM	72.7 °F	70.0 °F	90 %	WNW	3.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:34 AM	72.8 °F	70.0 °F	90 %	WNW	1.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:39 AM	72.8 °F	70.0 °F	91 %	WNW	0.9 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:44 AM	72.8 °F	70.0 °F	91 %	WNW	0.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:49 AM	72.8 °F	70.0 °F	91 %	West	1.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:54 AM	72.9 °F	70.0 °F	91 %	WSW	1.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:59 AM	72.8 °F	70.0 °F	91 %	WNW	2.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		7:04 AM	72.8 °F	70.0 °F	92 %	NNW	3.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:18 PM											
		7:44 PM	74.0 °F	71.0 °F	91 %	ESE	6.5 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		7:49 PM	74.0 °F	71.0 °F	91 %	ESE	8.0 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		7:54 PM	74.0 °F	71.0 °F	91 %	ESE	5.7 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		7:59 PM	73.9 °F	71.0 °F	90 %	ESE	8.5 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		8:04 PM	73.8 °F	71.0 °F	90 %	ESE	9.4 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		8:09 PM	73.7 °F	70.5 °F	90 %	ESE	7.4 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		8:14 PM	73.8 °F	70.0 °F	89 %	ESE	3.2 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		8:19 PM	73.9 °F	70.0 °F	88 %	ESE	0.8 mph	0.0 mph	30.01 in	0.00 in	0.19 in		
		8:24 PM	74.0 °F	70.0 °F	88 %	SSE	4.8 mph	0.0 mph	30.02 in	0.00 in	0.19 in		
		8:29 PM	74.2 °F	70.1 °F	87 %	SSE	4.1 mph	0.0 mph	30.02 in	0.00 in	0.19 in		
		8:34 PM	74.2 °F	70.6 °F	88 %	SE	6.9 mph	0.0 mph	30.02 in	0.00 in	0.19 in		
		8:39 PM	74.0 °F	70.5 °F	89 %	SE	**9.4 mph**	0.0 mph	30.02 in	0.00 in	0.19 in		
		8:44 PM	73.7 °F	70.6 °F	90 %	SSE	**10.1 mph**	0.0 mph	30.01 in	0.00 in	0.19 in		
		8:49 PM	73.3 °F	70.1 °F	90 %	SE	**12.7 mph**	1.7 mph	30.01 in	0.00 in	0.19 in		
		8:54 PM	73.2 °F	70.0 °F	90 %	SE	**10.6 mph**	0.0 mph	30.01 in	0.00 in	0.19 in		
		8:59 PM	73.0 °F	70.0 °F	90 %	SE	**10.5 mph**	0.0 mph	30.00 in	0.00 in	0.19 in		
		9:04 PM	72.9 °F	70.0 °F	90 %	ESE	**9.9 mph**	0.0 mph	30.01 in	0.00 in	0.19 in		
		9:09 PM	72.7 °F	70.0 °F	90 %	ESE	8.8 mph	0.0 mph	30.01 in	0.00 in	0.19 in		
		9:14 PM	72.6 °F	70.0 °F	90 %	ESE	7.5 mph	0.0 mph	30.01 in	0.00 in	0.19 in		
		9:19 PM	72.4 °F	69.3 °F	90 %	ESE	7.9 mph	0.0 mph	30.01 in	0.00 in	0.19 in		
		9:24 PM	72.3 °F	69.0 °F	90 %	SE	7.7 mph	0.0 mph	30.01 in	0.00 in	0.19 in		
		9:29 PM	72.2 °F	69.0 °F	90 %	ESE	7.9 mph	0.0 mph	30.01 in	0.00 in	0.19 in		
		9:34 PM	72.1 °F	69.0 °F	90 %	ESE	6.7 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		9:39 PM	72.1 °F	69.0 °F	90 %	ESE	6.5 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		9:44 PM	71.9 °F	69.0 °F	91 %	ESE	6.9 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		9:49 PM	71.9 °F	69.0 °F	91 %	ESE	7.7 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		9:54 PM	71.8 °F	69.0 °F	91 %	ESE	6.9 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		9:59 PM	71.7 °F	69.0 °F	91 %	ESE	5.2 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		10:04 PM	71.7 °F	69.0 °F	91 %	ESE	6.0 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		10:09 PM	71.6 °F	69.0 °F	91 %	SE	4.7 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:14 PM	71.6 °F	69.0 °F	91 %	SSE	4.4 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:19 PM	71.6 °F	69.0 °F	91 %	South	3.8 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:24 PM	71.4 °F	69.0 °F	91 %	SSE	2.5 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:29 PM	71.4 °F	69.0 °F	92 %	SE	2.1 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:34 PM	71.4 °F	69.0 °F	91 %	SE	2.5 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:39 PM	71.4 °F	69.0 °F	92 %	ESE	2.2 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:44 PM	71.4 °F	69.0 °F	92 %	ESE	1.6 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:49 PM	71.3 °F	69.0 °F	92 %	ESE	2.1 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:54 PM	71.4 °F	69.0 °F	92 %	ESE	1.3 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		10:59 PM	71.4 °F	69.0 °F	92 %	ESE	1.7 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		11:04 PM	71.3 °F	69.0 °F	92 %	ESE	1.2 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		11:09 PM	71.3 °F	69.0 °F	92 %	ESE	0.7 mph	0.0 mph	29.99 in	0.00 in	0.19 in		
		11:14 PM	71.2 °F	69.0 °F	92 %	ESE	0.1 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		11:19 PM	71.0 °F	69.0 °F	92 %	ESE	0.9 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		11:24 PM	70.9 °F	69.0 °F	92 %	ESE	0.4 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		11:29 PM	70.9 °F	69.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		11:34 PM	70.8 °F	69.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		11:39 PM	70.7 °F	69.0 °F	93 %	WSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		11:44 PM	70.7 °F	69.0 °F	93 %	NW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		11:49 PM	70.7 °F	69.0 °F	93 %	WNW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		11:54 PM	70.7 °F	69.0 °F	93 %	WSW	1.1 mph	0.0 mph	30.00 in	0.00 in	0.19 in		
		11:59 PM	70.6 °F	69.0 °F	93 %	West	5.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:04 AM	70.7 °F	69.0 °F	93 %	West	6.7 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		12:09 AM	70.7 °F	69.0 °F	93 %	NW	3.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:14 AM	70.6 °F	69.0 °F	93 %	NW	1.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:19 AM	70.6 °F	69.0 °F	93 %	NW	0.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:24 AM	70.6 °F	68.8 °F	93 %	NW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:29 AM	70.5 °F	68.6 °F	94 %	NNW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:34 AM	70.5 °F	69.0 °F	94 %	NNW	1.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:39 AM	70.4 °F	69.0 °F	94 %	NNW	2.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:44 AM	70.4 °F	69.0 °F	94 %	NNW	0.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:49 AM	70.3 °F	69.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:54 AM	70.2 °F	69.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:59 AM	70.2 °F	68.9 °F	94 %	NNW	1.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:04 AM	69.9 °F	68.0 °F	94 %	-	2.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:09 AM	69.8 °F	68.0 °F	94 %	East	3.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:14 AM	69.8 °F	68.0 °F	94 %	East	3.9 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:19 AM	69.7 °F	68.0 °F	94 %	ENE	2.9 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
5	6/2/2025 - 6/3/2025	1:24 AM	69.7 °F	68.0 °F	94 %	NE	2.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in	1-2, 7-29	Yes
		1:29 AM	69.7 °F	68.0 °F	94 %	ENE	2.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:34 AM	69.6 °F	68.0 °F	94 %	ENE	2.9 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:39 AM	69.5 °F	68.0 °F	94 %	East	4.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:44 AM	69.5 °F	68.0 °F	94 %	East	4.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:49 AM	69.5 °F	68.0 °F	94 %	East	3.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:54 AM	69.5 °F	68.0 °F	94 %	East	3.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:59 AM	69.5 °F	68.0 °F	94 %	East	3.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:04 AM	69.5 °F	68.0 °F	94 %	East	3.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:09 AM	69.6 °F	68.0 °F	94 %	East	3.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:14 AM	69.7 °F	68.0 °F	94 %	East	4.4 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:19 AM	69.7 °F	68.0 °F	94 %	East	5.9 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:24 AM	69.7 °F	68.0 °F	94 %	East	6.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:29 AM	69.7 °F	68.0 °F	94 %	East	7.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:34 AM	69.7 °F	68.0 °F	94 %	ESE	6.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:39 AM	69.7 °F	68.0 °F	94 %	ESE	6.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:44 AM	69.8 °F	68.0 °F	94 %	East	7.4 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:49 AM	69.8 °F	68.0 °F	94 %	East	6.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:54 AM	69.8 °F	68.0 °F	94 %	East	6.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:59 AM	69.8 °F	68.0 °F	94 %	ESE	6.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:04 AM	69.8 °F	68.0 °F	94 %	East	5.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:09 AM	69.8 °F	68.0 °F	94 %	ESE	5.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:14 AM	69.8 °F	68.0 °F	94 %	ESE	4.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:19 AM	69.8 °F	68.0 °F	94 %	ESE	4.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:24 AM	69.8 °F	68.0 °F	94 %	ESE	4.3 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:29 AM	69.9 °F	68.0 °F	93 %	SE	4.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:34 AM	69.8 °F	68.0 °F	93 %	SSE	5.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:39 AM	69.7 °F	68.0 °F	93 %	SE	5.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:44 AM	69.6 °F	68.0 °F	93 %	SE	7.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:49 AM	69.5 °F	68.0 °F	93 %	ESE	6.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:54 AM	69.5 °F	68.0 °F	93 %	ESE	7.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:59 AM	69.4 °F	67.4 °F	93 %	ESE	5.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:04 AM	69.3 °F	67.3 °F	93 %	ESE	5.3 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:09 AM	69.3 °F	67.0 °F	93 %	ESE	3.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:14 AM	69.1 °F	67.0 °F	93 %	ESE	4.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:19 AM	69.0 °F	67.0 °F	93 %	East	4.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:24 AM	68.9 °F	67.0 °F	94 %	East	4.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:29 AM	68.8 °F	67.0 °F	94 %	East	3.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:34 AM	68.6 °F	67.0 °F	94 %	East	3.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:39 AM	68.5 °F	67.0 °F	94 %	ENE	2.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:44 AM	68.5 °F	67.0 °F	94 %	East	3.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:49 AM	68.5 °F	67.0 °F	94 %	East	5.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:54 AM	68.3 °F	67.0 °F	94 %	East	3.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:59 AM	68.3 °F	67.0 °F	94 %	East	4.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:04 AM	68.3 °F	67.0 °F	94 %	East	3.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:09 AM	68.3 °F	67.0 °F	94 %	East	3.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:14 AM	68.3 °F	67.0 °F	94 %	East	4.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:19 AM	68.4 °F	67.0 °F	94 %	East	3.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:24 AM	68.4 °F	67.0 °F	94 %	East	3.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:29 AM	68.6 °F	67.0 °F	94 %	East	4.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:34 AM	68.6 °F	67.0 °F	94 %	East	4.3 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:39 AM	68.8 °F	67.0 °F	94 %	East	4.4 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:44 AM	68.9 °F	67.0 °F	94 %	East	4.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:49 AM	68.9 °F	67.0 °F	94 %	East	3.9 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:54 AM	68.9 °F	67.0 °F	94 %	East	4.3 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:59 AM	69.0 °F	67.0 °F	94 %	ESE	5.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:04 AM	68.9 °F	67.0 °F	94 %	ESE	3.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:09 AM	68.9 °F	67.2 °F	94 %	ESE	3.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:14 AM	68.9 °F	67.8 °F	95 %	ESE	3.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:19 AM	68.9 °F	68.0 °F	95 %	East	3.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:24 AM	68.9 °F	67.9 °F	95 %	East	3.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:29 AM	68.9 °F	68.0 °F	95 %	East	4.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:34 AM	68.9 °F	68.0 °F	95 %	East	2.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:39 AM	68.8 °F	67.4 °F	95 %	East	3.3 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:44 AM	68.9 °F	67.9 °F	95 %	East	2.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:49 AM	68.9 °F	67.8 °F	95 %	East	2.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:54 AM	68.8 °F	67.4 °F	95 %	East	1.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:59 AM	68.9 °F	67.6 °F	95 %	East	0.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		7:04 AM	68.7 °F	67.0 °F	95 %	East	2.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:18 PM											
		7:44 PM	74.9 °F	73.0 °F	93 %	ESE	4.2 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		7:49 PM	74.9 °F	73.0 °F	92 %	ESE	5.3 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		7:54 PM	74.8 °F	72.3 °F	92 %	ESE	6.0 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		7:59 PM	74.9 °F	72.7 °F	92 %	ESE	5.3 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		8:04 PM	74.8 °F	72.2 °F	91 %	ESE	5.7 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		8:09 PM	74.7 °F	72.0 °F	91 %	ESE	6.6 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		8:14 PM	74.6 °F	72.0 °F	91 %	ESE	6.9 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		8:19 PM	74.6 °F	72.0 °F	91 %	ESE	5.8 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		8:24 PM	74.5 °F	72.0 °F	91 %	ESE	6.1 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		8:29 PM	74.4 °F	72.0 °F	91 %	ESE	6.5 mph	0.0 mph	29.97 in	0.00 in	1.13 in		
		8:34 PM	74.3 °F	72.0 °F	91 %	ESE	6.4 mph	0.0 mph	29.97 in	0.00 in	1.13 in		
		8:39 PM	74.2 °F	71.5 °F	91 %	ESE	7.3 mph	0.0 mph	29.97 in	0.00 in	1.13 in		
		8:44 PM	74.0 °F	71.0 °F	90 %	ESE	8.1 mph	0.0 mph	29.97 in	0.00 in	1.13 in		
		8:49 PM	74.0 °F	71.0 °F	90 %	ESE	8.6 mph	0.0 mph	29.97 in	0.00 in	1.13 in		
		8:54 PM	73.9 °F	71.0 °F	90 %	ESE	7.6 mph	0.0 mph	29.97 in	0.00 in	1.13 in		
		8:59 PM	73.8 °F	71.0 °F	90 %	ESE	6.5 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:04 PM	73.7 °F	71.0 °F	90 %	ESE	6.1 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:09 PM	73.6 °F	71.0 °F	90 %	ESE	5.5 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:14 PM	73.4 °F	70.2 °F	90 %	ESE	5.2 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:19 PM	73.3 °F	70.0 °F	90 %	East	5.3 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:24 PM	73.2 °F	70.0 °F	90 %	East	6.3 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:29 PM	73.0 °F	70.0 °F	90 %	East	6.1 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:34 PM	72.8 °F	70.0 °F	91 %	ESE	5.4 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:39 PM	72.8 °F	70.0 °F	91 %	ESE	5.4 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:44 PM	72.6 °F	70.0 °F	90 %	ESE	5.4 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:49 PM	72.6 °F	70.0 °F	90 %	ESE	5.1 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:54 PM	72.4 °F	69.4 °F	90 %	ESE	4.8 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		9:59 PM	72.4 °F	69.3 °F	90 %	East	5.0 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		10:04 PM	72.3 °F	70.0 °F	91 %	East	3.8 mph	0.0 mph	29.96 in	0.00 in	1.13 in		
		10:09 PM	72.2 °F	69.8 °F	91 %	East	4.5 mph	0.0 mph	29.97 in	0.00 in	1.13 in		
		10:14 PM	72.1 °F	69.0 °F	91 %	East	4.0 mph	0.0 mph	29.97 in	0.00 in	1.13 in		
		10:19 PM	72.1 °F	69.0 °F	91 %	East	3.9 mph	0.0 mph	29.97 in	0.00 in	1.13 in		
		10:24 PM	71.9 °F	69.0 °F	91 %	East	5.0 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		10:29 PM	71.9 °F	69.0 °F	91 %	East	5.2 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		10:34 PM	71.8 °F	69.0 °F	91 %	East	4.1 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		10:39 PM	71.7 °F	69.0 °F	91 %	East	4.1 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		10:44 PM	71.6 °F	69.0 °F	91 %	East	3.3 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		10:49 PM	71.5 °F	69.0 °F	91 %	East	3.3 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		10:54 PM	71.4 °F	69.0 °F	91 %	East	2.5 mph	0.0 mph	29.99 in	0.00 in	1.13 in		
		10:59 PM	71.3 °F	69.0 °F	91 %	ENE	1.7 mph	0.0 mph	29.99 in	0.00 in	1.13 in		
		11:04 PM	71.3 °F	69.0 °F	91 %	NE	3.0 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		11:09 PM	71.2 °F	69.0 °F	91 %	ENE	3.0 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		11:14 PM	71.3 °F	69.0 °F	91 %	ENE	3.6 mph	0.0 mph	29.98 in	0.00 in	1.13 in		
		11:19 PM	71.1 °F	68.5 °F	91 %	East	3.1 mph	0.0 mph	29.99 in	0.00 in	1.13 in		
		11:24 PM	71.0 °F	68.0 °F	91 %	East	2.8 mph	0.0 mph	29.99 in	0.00 in	1.13 in		
		11:29 PM	71.0 °F	68.0 °F	91 %	East	2.4 mph	0.0 mph	29.99 in	0.00 in	1.13 in		
		11:34 PM	70.9 °F	68.0 °F	91 %	East	2.6 mph	0.0 mph	29.99 in	0.00 in	1.13 in		
		11:39 PM	70.9 °F	68.0 °F	91 %	ENE	2.7 mph	0.0 mph	29.99 in	0.00 in	1.13 in		
		11:44 PM	70.8 °F	68.0 °F	91 %	ENE	2.6 mph	0.0 mph	30.00 in	0.00 in	1.13 in		
		11:49 PM	70.8 °F	68.0 °F	92 %	East	2.4 mph	0.0 mph	30.00 in	0.00 in	1.13 in		
		11:54 PM	70.7 °F	68.0 °F	92 %	East	2.4 mph	0.0 mph	30.00 in	0.00 in	1.13 in		
		11:59 PM	70.7 °F	68.0 °F	92 %	East	1.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:04 AM	70.7 °F	68.0 °F	92 %	East	0.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:09 AM	70.7 °F	68.0 °F	92 %	East	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		12:14 AM	70.7 °F	68.0 °F	92 %	East	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		12:19 AM	70.7 °F	68.0 °F	92 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:24 AM	70.6 °F	68.0 °F	92 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:29 AM	70.5 °F	68.0 °F	92 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:34 AM	70.3 °F	68.0 °F	92 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:39 AM	70.3 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:44 AM	70.5 °F	68.0 °F	93 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:49 AM	70.6 °F	68.7 °F	93 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:54 AM	70.7 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:59 AM	70.8 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:04 AM	70.8 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:09 AM	71.0 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:14 AM	71.0 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:19 AM	70.9 °F	69.0 °F	93 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
6	6/3/2025 - 6/4/2025	1:24 AM	71.0 °F	69.0 °F	92 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in	1-2, 7-29	Yes
		1:29 AM	71.0 °F	69.0 °F	92 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:34 AM	71.2 °F	69.0 °F	92 %	East	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:39 AM	71.1 °F	69.0 °F	92 %	East	2.3 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:44 AM	71.1 °F	69.0 °F	92 %	East	2.4 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:49 AM	71.2 °F	69.0 °F	92 %	East	2.4 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:54 AM	71.2 °F	69.0 °F	92 %	East	3.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:59 AM	71.3 °F	69.0 °F	92 %	East	4.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:04 AM	71.2 °F	69.0 °F	92 %	East	3.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:09 AM	71.0 °F	69.0 °F	92 %	East	3.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:14 AM	70.9 °F	69.0 °F	93 %	East	2.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:19 AM	70.9 °F	69.0 °F	93 %	East	3.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:24 AM	70.9 °F	69.0 °F	93 %	East	3.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:29 AM	70.8 °F	69.0 °F	93 %	ENE	3.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:34 AM	70.7 °F	68.9 °F	93 %	East	3.7 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:39 AM	70.6 °F	68.0 °F	92 %	East	3.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:44 AM	70.4 °F	68.0 °F	92 %	East	3.7 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:49 AM	70.4 °F	68.0 °F	93 %	East	3.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:54 AM	70.4 °F	68.0 °F	93 %	East	2.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		2:59 AM	70.4 °F	68.0 °F	93 %	East	2.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:04 AM	70.4 °F	68.0 °F	93 %	East	2.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:09 AM	70.3 °F	68.0 °F	93 %	East	2.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:14 AM	70.2 °F	68.0 °F	93 %	East	2.7 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:19 AM	70.1 °F	68.0 °F	93 %	East	2.4 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:24 AM	70.2 °F	68.0 °F	93 %	East	2.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
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		3:44 AM	70.3 °F	68.0 °F	93 %	East	2.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		3:49 AM	70.0 °F	68.0 °F	93 %	East	3.1 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		3:54 AM	69.9 °F	68.0 °F	93 %	East	3.4 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		3:59 AM	69.9 °F	68.0 °F	93 %	East	3.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
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		4:14 AM	70.0 °F	68.0 °F	93 %	East	3.6 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		4:19 AM	70.1 °F	68.0 °F	93 %	East	4.8 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
		4:24 AM	70.1 °F	68.0 °F	93 %	East	5.7 mph	0.0 mph	29.94 in	0.00 in	0.00 in		
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		4:34 AM	70.1 °F	68.0 °F	93 %	ESE	5.6 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:39 AM	70.2 °F	68.0 °F	93 %	ESE	5.3 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:44 AM	70.2 °F	68.0 °F	93 %	ESE	5.6 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:49 AM	70.2 °F	68.0 °F	93 %	ESE	6.0 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		4:54 AM	70.3 °F	68.0 °F	93 %	ESE	5.8 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
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		5:04 AM	70.4 °F	68.0 °F	93 %	ESE	5.6 mph	0.0 mph	29.95 in	0.00 in	0.00 in		
		5:09 AM	70.4 °F	68.0 °F	93 %	ESE	7.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:14 AM	70.5 °F	68.0 °F	93 %	ESE	7.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:19 AM	70.5 °F	68.0 °F	93 %	ESE	7.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:24 AM	70.5 °F	68.3 °F	93 %	ESE	7.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:29 AM	70.5 °F	68.2 °F	93 %	ESE	7.6 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:34 AM	70.5 °F	68.2 °F	93 %	ESE	6.2 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:39 AM	70.5 °F	68.1 °F	93 %	ESE	7.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:44 AM	70.5 °F	68.0 °F	93 %	ESE	7.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:49 AM	70.5 °F	68.0 °F	93 %	ESE	8.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:54 AM	70.5 °F	68.0 °F	93 %	ESE	8.1 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:59 AM	70.5 °F	68.0 °F	93 %	ESE	7.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:04 AM	70.5 °F	68.0 °F	93 %	ESE	7.7 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:09 AM	70.5 °F	68.0 °F	93 %	ESE	7.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:14 AM	70.5 °F	68.1 °F	93 %	ESE	6.9 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:19 AM	70.5 °F	68.0 °F	93 %	ESE	6.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:24 AM	70.5 °F	68.2 °F	93 %	ESE	6.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		6:29 AM	70.6 °F	68.6 °F	93 %	ESE	6.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:34 AM	70.6 °F	69.0 °F	93 %	ESE	6.4 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:39 AM	70.6 °F	69.0 °F	93 %	ESE	7.3 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:44 AM	70.7 °F	69.0 °F	93 %	ESE	7.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:49 AM	70.7 °F	69.0 °F	93 %	ESE	6.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:54 AM	70.8 °F	69.0 °F	93 %	ESE	7.4 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:59 AM	70.8 °F	69.0 °F	93 %	ESE	7.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		7:04 AM	70.9 °F	69.0 °F	93 %	ESE	7.9 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:19 PM											
		7:49 PM	75.8 °F	72.0 °F	87 %	SE	3.1 mph	0.0 mph	30.00 in	0.00 in	0.44 in		
		7:54 PM	75.8 °F	72.0 °F	87 %	ESE	2.9 mph	0.0 mph	30.00 in	0.00 in	0.44 in		
		7:59 PM	75.8 °F	72.0 °F	87 %	ESE	2.5 mph	0.0 mph	30.01 in	0.00 in	0.44 in		
		8:04 PM	75.6 °F	72.0 °F	87 %	SE	3.5 mph	0.0 mph	30.01 in	0.00 in	0.44 in		
		8:09 PM	75.5 °F	71.0 °F	87 %	ESE	4.0 mph	0.0 mph	30.01 in	0.00 in	0.44 in		
		8:14 PM	75.5 °F	71.0 °F	87 %	ESE	3.4 mph	0.0 mph	30.01 in	0.00 in	0.44 in		
		8:19 PM	75.5 °F	71.3 °F	87 %	ESE	2.8 mph	0.0 mph	30.01 in	0.00 in	0.44 in		
		8:24 PM	75.5 °F	71.5 °F	88 %	ESE	2.4 mph	0.0 mph	30.01 in	0.00 in	0.44 in		
		8:29 PM	75.4 °F	71.5 °F	88 %	SE	2.5 mph	0.0 mph	30.02 in	0.00 in	0.44 in		
		8:34 PM	75.3 °F	72.0 °F	88 %	SE	2.6 mph	0.0 mph	30.02 in	0.00 in	0.44 in		
		8:39 PM	75.2 °F	72.0 °F	88 %	ESE	2.7 mph	0.0 mph	30.02 in	0.00 in	0.44 in		
		8:44 PM	75.1 °F	71.4 °F	88 %	ESE	2.9 mph	0.0 mph	30.02 in	0.00 in	0.44 in		
		8:49 PM	75.1 °F	71.0 °F	88 %	ESE	2.6 mph	0.0 mph	30.02 in	0.00 in	0.44 in		
		8:54 PM	75.1 °F	71.0 °F	88 %	ESE	2.9 mph	0.0 mph	30.02 in	0.00 in	0.44 in		
		8:59 PM	75.0 °F	71.0 °F	88 %	ESE	3.2 mph	0.0 mph	30.02 in	0.00 in	0.44 in		
		9:04 PM	75.0 °F	71.0 °F	88 %	ESE	3.8 mph	0.0 mph	30.02 in	0.00 in	0.44 in		
		9:09 PM	74.9 °F	71.0 °F	88 %	ESE	4.3 mph	0.0 mph	30.02 in	0.00 in	0.44 in		
		9:14 PM	74.9 °F	71.0 °F	88 %	ESE	5.3 mph	0.0 mph	30.03 in	0.00 in	0.44 in		
		9:19 PM	74.8 °F	71.0 °F	88 %	ESE	5.7 mph	0.0 mph	30.03 in	0.00 in	0.44 in		
		9:24 PM	74.8 °F	71.0 °F	89 %	ESE	6.3 mph	0.0 mph	30.03 in	0.00 in	0.44 in		
		9:29 PM	74.7 °F	71.0 °F	89 %	ESE	6.4 mph	0.0 mph	30.03 in	0.00 in	0.44 in		
		9:34 PM	74.7 °F	71.0 °F	89 %	SE	6.9 mph	0.0 mph	30.03 in	0.00 in	0.44 in		
		9:39 PM	74.7 °F	71.0 °F	89 %	SE	6.9 mph	0.0 mph	30.03 in	0.00 in	0.44 in		
		9:44 PM	74.7 °F	71.0 °F	89 %	ESE	7.4 mph	0.0 mph	30.04 in	0.00 in	0.44 in		
		9:49 PM	74.7 °F	71.0 °F	89 %	ESE	8.1 mph	0.0 mph	30.04 in	0.00 in	0.44 in		
		9:54 PM	74.6 °F	71.0 °F	89 %	ESE	7.6 mph	0.0 mph	30.04 in	0.00 in	0.44 in		
		9:59 PM	74.6 °F	71.0 °F	89 %	ESE	7.5 mph	0.0 mph	30.04 in	0.00 in	0.44 in		
		10:04 PM	74.5 °F	71.0 °F	89 %	ESE	6.6 mph	0.0 mph	30.04 in	0.00 in	0.44 in		
		10:09 PM	74.5 °F	71.0 °F	89 %	ESE	5.3 mph	0.0 mph	30.05 in	0.00 in	0.44 in		
		10:14 PM	74.4 °F	71.0 °F	89 %	ESE	5.1 mph	0.0 mph	30.05 in	0.00 in	0.44 in		
		10:19 PM	74.4 °F	71.0 °F	89 %	SE	4.5 mph	0.0 mph	30.05 in	0.00 in	0.44 in		
		10:24 PM	74.2 °F	71.0 °F	89 %	SE	4.3 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		10:29 PM	74.2 °F	71.0 °F	90 %	ESE	5.6 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		10:34 PM	74.1 °F	71.0 °F	90 %	ESE	5.6 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		10:39 PM	74.0 °F	71.0 °F	90 %	ESE	4.7 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		10:44 PM	73.9 °F	71.0 °F	90 %	ESE	3.0 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		10:49 PM	73.8 °F	71.0 °F	90 %	ESE	2.5 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		10:54 PM	73.7 °F	71.0 °F	91 %	ESE	2.5 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		10:59 PM	73.5 °F	71.0 °F	91 %	ESE	2.3 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		11:04 PM	73.4 °F	71.0 °F	91 %	ESE	2.4 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		11:09 PM	73.3 °F	71.0 °F	91 %	ESE	3.5 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		11:14 PM	73.3 °F	71.0 °F	91 %	ESE	2.3 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		11:19 PM	73.3 °F	71.0 °F	91 %	ESE	1.8 mph	0.0 mph	30.06 in	0.00 in	0.44 in		
		11:24 PM	73.2 °F	71.0 °F	91 %	SE	0.4 mph	0.0 mph	30.07 in	0.00 in	0.44 in		
		11:29 PM	73.2 °F	71.0 °F	91 %	ESE	1.3 mph	0.0 mph	30.07 in	0.00 in	0.44 in		
		11:34 PM	73.2 °F	71.0 °F	91 %	ESE	0.9 mph	0.0 mph	30.07 in	0.00 in	0.44 in		
		11:39 PM	73.3 °F	71.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.44 in		
		11:44 PM	73.2 °F	70.7 °F	91 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.44 in		
		11:49 PM	73.0 °F	70.0 °F	91 %	ESE	1.0 mph	0.0 mph	30.08 in	0.00 in	0.44 in		
		11:54 PM	73.0 °F	70.0 °F	91 %	ESE	2.4 mph	0.0 mph	30.08 in	0.00 in	0.44 in		
		11:59 PM	73.0 °F	70.0 °F	91 %	ESE	3.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:04 AM	73.0 °F	70.0 °F	91 %	ESE	1.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:09 AM	73.1 °F	70.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:14 AM	73.1 °F	70.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:19 AM	73.0 °F	70.1 °F	91 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:24 AM	72.9 °F	70.6 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:29 AM	72.8 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:34 AM	72.8 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:39 AM	72.7 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:44 AM	72.8 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:49 AM	72.9 °F	70.6 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:54 AM	72.8 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:59 AM	72.8 °F	70.2 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:04 AM	72.7 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:09 AM	72.6 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:14 AM	72.6 °F	70.2 °F	92 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:19 AM	72.5 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
7	6/4/2025 - 6/5/2025	1:24 AM	72.5 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in	1-2, 7-29	Yes
		1:29 AM	72.6 °F	70.6 °F	93 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:34 AM	72.6 °F	70.8 °F	93 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:39 AM	72.5 °F	70.4 °F	93 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:44 AM	72.5 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:49 AM	72.4 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:54 AM	72.4 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:59 AM	72.4 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:04 AM	72.3 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:09 AM	72.4 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:14 AM	72.4 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:19 AM	72.4 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:24 AM	72.3 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:29 AM	72.3 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:34 AM	72.3 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:39 AM	72.3 °F	70.4 °F	94 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:44 AM	72.3 °F	71.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:49 AM	72.2 °F	70.2 °F	94 %	East	2.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:54 AM	72.2 °F	70.0 °F	94 %	East	2.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:59 AM	72.1 °F	70.0 °F	94 %	East	3.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:04 AM	72.1 °F	70.0 °F	94 %	ENE	3.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:09 AM	72.1 °F	70.0 °F	94 %	ENE	3.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:14 AM	72.1 °F	70.0 °F	94 %	ENE	3.1 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:19 AM	71.9 °F	70.0 °F	94 %	East	2.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:24 AM	71.9 °F	70.0 °F	94 %	East	1.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:29 AM	72.0 °F	70.0 °F	94 %	NE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:34 AM	72.0 °F	70.0 °F	94 %	NE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:39 AM	72.1 °F	70.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:44 AM	72.1 °F	70.0 °F	94 %	NE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:49 AM	72.1 °F	70.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:54 AM	72.0 °F	70.0 °F	94 %	West	4.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:59 AM	72.0 °F	70.0 °F	94 %	West	5.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:04 AM	72.1 °F	70.0 °F	94 %	West	2.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:09 AM	72.1 °F	70.0 °F	94 %	West	0.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:14 AM	72.1 °F	70.0 °F	94 %	West	1.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:19 AM	72.1 °F	70.0 °F	94 %	West	0.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:24 AM	72.1 °F	70.0 °F	94 %	NE	1.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:29 AM	72.2 °F	70.0 °F	94 %	NE	2.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:34 AM	72.2 °F	70.0 °F	94 %	NE	3.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:39 AM	72.2 °F	70.0 °F	94 %	NE	2.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:44 AM	72.2 °F	70.0 °F	94 %	NE	3.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:49 AM	72.2 °F	70.0 °F	94 %	ENE	3.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:54 AM	72.2 °F	70.0 °F	94 %	ENE	4.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:59 AM	72.2 °F	70.0 °F	94 %	ENE	4.4 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:04 AM	72.3 °F	70.5 °F	94 %	East	3.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:09 AM	72.3 °F	70.7 °F	94 %	East	3.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:14 AM	72.3 °F	71.0 °F	94 %	East	4.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:19 AM	72.5 °F	71.0 °F	94 %	East	4.7 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:24 AM	72.4 °F	71.0 °F	94 %	East	5.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:29 AM	72.5 °F	71.0 °F	94 %	East	5.8 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:34 AM	72.5 °F	71.0 °F	94 %	East	5.9 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:39 AM	72.6 °F	71.0 °F	94 %	East	4.9 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:44 AM	72.7 °F	71.0 °F	94 %	East	5.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:49 AM	72.8 °F	71.0 °F	94 %	East	6.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:54 AM	72.9 °F	71.1 °F	95 %	East	6.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:59 AM	73.0 °F	71.8 °F	95 %	East	6.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:04 AM	73.0 °F	72.0 °F	95 %	East	5.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:09 AM	73.1 °F	71.4 °F	94 %	East	6.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:14 AM	73.1 °F	71.2 °F	94 %	East	6.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:19 AM	73.2 °F	71.5 °F	95 %	East	6.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:24 AM	73.2 °F	71.0 °F	94 %	East	7.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:29 AM	73.2 °F	71.2 °F	94 %	East	7.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:34 AM	73.2 °F	71.4 °F	94 %	East	5.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:39 AM	73.2 °F	71.2 °F	94 %	East	4.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:44 AM	73.3 °F	71.7 °F	94 %	East	5.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:49 AM	73.3 °F	72.0 °F	94 %	East	5.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:54 AM	73.4 °F	72.0 °F	94 %	East	5.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:59 AM	73.5 °F	72.0 °F	94 %	East	5.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		7:04 AM	73.5 °F	72.0 °F	94 %	East	5.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:19 PM											
		7:49 PM	85.3 °F	76.0 °F	73 %	West	4.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		7:54 PM	85.1 °F	76.0 °F	74 %	West	2.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		7:59 PM	84.9 °F	76.0 °F	74 %	WNW	3.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:04 PM	84.9 °F	76.0 °F	74 %	WNW	2.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:09 PM	84.7 °F	76.0 °F	74 %	WNW	2.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:14 PM	84.5 °F	75.4 °F	74 %	WNW	2.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:19 PM	84.5 °F	75.4 °F	74 %	WNW	2.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:24 PM	84.3 °F	76.0 °F	75 %	WNW	1.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:29 PM	84.2 °F	75.7 °F	75 %	WNW	1.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:34 PM	83.9 °F	76.0 °F	76 %	WNW	0.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:39 PM	84.1 °F	75.7 °F	76 %	WNW	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:44 PM	83.5 °F	76.0 °F	78 %	WNW	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:49 PM	82.8 °F	76.0 °F	79 %	WNW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:54 PM	82.3 °F	75.8 °F	80 %	WNW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:59 PM	82.2 °F	76.0 °F	81 %	WNW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:04 PM	82.1 °F	75.9 °F	81 %	WNW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:09 PM	81.9 °F	75.5 °F	81 %	WNW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:14 PM	81.8 °F	75.7 °F	81 %	WNW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:19 PM	81.8 °F	76.0 °F	82 %	WNW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:24 PM	81.4 °F	75.8 °F	83 %	WNW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:29 PM	81.2 °F	76.0 °F	83 %	WNW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		9:34 PM	80.9 °F	75.9 °F	84 %	WNW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		9:39 PM	80.4 °F	75.6 °F	85 %	WNW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		9:44 PM	80.1 °F	75.0 °F	85 %	WNW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		9:49 PM	80.1 °F	75.0 °F	85 %	WNW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:54 PM	80.3 °F	75.3 °F	85 %	WNW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:59 PM	80.2 °F	75.0 °F	84 %	WNW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:04 PM	79.8 °F	75.0 °F	85 %	SSW	1.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:09 PM	79.4 °F	75.0 °F	86 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:14 PM	79.6 °F	75.0 °F	86 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:19 PM	79.4 °F	75.0 °F	86 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:24 PM	79.4 °F	75.0 °F	86 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:29 PM	79.7 °F	75.0 °F	86 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:34 PM	79.4 °F	75.0 °F	86 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:39 PM	79.0 °F	75.0 °F	87 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:44 PM	78.8 °F	75.0 °F	87 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:49 PM	78.6 °F	74.9 °F	87 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:54 PM	78.4 °F	75.0 °F	88 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		10:59 PM	78.6 °F	75.0 °F	88 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		11:04 PM	78.3 °F	74.5 °F	88 %	SSW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		11:09 PM	77.7 °F	74.0 °F	89 %	SSW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:14 PM	77.4 °F	74.0 °F	89 %	SSW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:19 PM	78.1 °F	74.2 °F	88 %	SSW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:24 PM	78.8 °F	75.0 °F	87 %	SE	0.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		11:29 PM	78.5 °F	74.6 °F	87 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:34 PM	78.1 °F	74.1 °F	88 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:39 PM	77.9 °F	74.4 °F	88 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:44 PM	77.7 °F	74.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:49 PM	77.6 °F	74.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		11:54 PM	77.5 °F	74.1 °F	89 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		11:59 PM	77.5 °F	74.2 °F	89 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:04 AM	77.3 °F	74.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:09 AM	77.1 °F	74.0 °F	90 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:14 AM	76.9 °F	74.0 °F	90 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:19 AM	76.7 °F	74.0 °F	90 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:24 AM	76.7 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:29 AM	76.7 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:34 AM	76.6 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:39 AM	76.3 °F	74.0 °F	91 %	ESE	1.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:44 AM	76.2 °F	73.6 °F	91 %	ESE	0.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:49 AM	76.0 °F	73.2 °F	91 %	ESE	1.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:54 AM	76.0 °F	74.0 °F	92 %	ESE	1.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:59 AM	76.1 °F	74.0 °F	92 %	ESE	1.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:04 AM	76.4 °F	74.0 °F	92 %	ESE	0.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:09 AM	76.6 °F	74.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:14 AM	76.8 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:19 AM	76.6 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
8	6/5/2025 - 6/6/2025	1:24 AM	76.6 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in	1-2, 7-29	Yes
		1:29 AM	76.6 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:34 AM	77.0 °F	74.1 °F	91 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:39 AM	77.3 °F	75.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:44 AM	77.3 °F	74.1 °F	90 %	ESE	0.6 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:49 AM	76.9 °F	74.0 °F	90 %	ESE	2.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:54 AM	76.6 °F	74.0 °F	91 %	ESE	1.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		1:59 AM	76.6 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:04 AM	76.5 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:09 AM	76.3 °F	74.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:14 AM	76.1 °F	74.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:19 AM	75.9 °F	73.6 °F	92 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:24 AM	75.8 °F	73.3 °F	92 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:29 AM	75.9 °F	73.7 °F	92 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:34 AM	75.9 °F	74.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:39 AM	75.9 °F	74.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:44 AM	75.9 °F	74.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:49 AM	75.8 °F	74.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:54 AM	75.5 °F	73.3 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:59 AM	75.5 °F	73.1 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:04 AM	75.5 °F	73.5 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:09 AM	75.3 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:14 AM	75.2 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:19 AM	75.2 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:24 AM	75.3 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:29 AM	75.3 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:34 AM	75.1 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:39 AM	74.8 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:44 AM	74.6 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:49 AM	74.7 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:54 AM	74.8 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:59 AM	74.7 °F	73.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:04 AM	74.5 °F	72.7 °F	93 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:09 AM	74.4 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:14 AM	74.2 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:19 AM	74.2 °F	72.4 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:24 AM	74.1 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:29 AM	74.1 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:34 AM	73.9 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:39 AM	73.7 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:44 AM	73.7 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:49 AM	73.7 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:54 AM	73.7 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:59 AM	73.5 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:04 AM	73.4 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:09 AM	73.5 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:14 AM	73.3 °F	71.9 °F	94 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:19 AM	73.5 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:24 AM	73.4 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:29 AM	73.5 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:34 AM	73.5 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:39 AM	73.7 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:44 AM	73.8 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:49 AM	73.4 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:54 AM	73.3 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:59 AM	73.3 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:04 AM	73.3 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:09 AM	73.3 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:14 AM	73.2 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:19 AM	73.3 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:24 AM	73.4 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:29 AM	73.3 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:34 AM	73.2 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:39 AM	72.9 °F	71.3 °F	95 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:44 AM	73.1 °F	71.8 °F	95 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:49 AM	73.4 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:54 AM	73.5 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:59 AM	73.7 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		7:04 AM	73.6 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:20 PM											
		7:49 PM	85.9 °F	76.0 °F	73 %	SW	8.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:54 PM	85.6 °F	76.0 °F	73 %	SW	6.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		7:59 PM	85.3 °F	76.0 °F	74 %	SW	5.9 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:04 PM	85.1 °F	76.0 °F	74 %	SW	6.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:09 PM	84.9 °F	76.0 °F	75 %	SW	5.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:14 PM	84.6 °F	76.0 °F	76 %	SW	4.9 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:19 PM	84.3 °F	76.0 °F	76 %	WSW	4.6 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		8:24 PM	84.1 °F	76.0 °F	77 %	WSW	4.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		8:29 PM	83.9 °F	76.0 °F	77 %	WSW	5.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:34 PM	83.6 °F	76.0 °F	77 %	WSW	5.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:39 PM	83.4 °F	76.0 °F	78 %	WSW	5.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:44 PM	83.2 °F	76.0 °F	78 %	WSW	4.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:49 PM	83.0 °F	76.0 °F	79 %	WSW	4.5 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		8:54 PM	82.8 °F	76.0 °F	79 %	WSW	4.1 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		8:59 PM	82.6 °F	76.0 °F	80 %	WSW	4.3 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:04 PM	82.4 °F	76.0 °F	80 %	WSW	4.1 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:09 PM	82.3 °F	76.0 °F	80 %	WSW	4.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:14 PM	82.2 °F	76.0 °F	80 %	WSW	4.2 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:19 PM	82.0 °F	76.0 °F	81 %	WSW	4.7 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:24 PM	81.8 °F	75.6 °F	81 %	WSW	3.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:29 PM	81.6 °F	75.3 °F	81 %	WSW	3.4 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:34 PM	81.5 °F	75.6 °F	82 %	West	4.5 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:39 PM	81.3 °F	75.0 °F	82 %	West	4.5 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:44 PM	81.2 °F	75.0 °F	82 %	West	4.5 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:49 PM	81.0 °F	75.1 °F	83 %	WSW	4.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:54 PM	80.8 °F	75.0 °F	83 %	West	4.2 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:59 PM	80.7 °F	75.0 °F	83 %	West	4.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:04 PM	80.6 °F	75.0 °F	83 %	West	4.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:09 PM	80.4 °F	75.0 °F	84 %	WSW	3.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:14 PM	80.2 °F	75.0 °F	84 %	WSW	3.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:19 PM	80.1 °F	75.0 °F	85 %	West	2.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:24 PM	80.0 °F	75.0 °F	85 %	West	2.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:29 PM	80.0 °F	75.0 °F	85 %	West	2.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:34 PM	79.9 °F	75.0 °F	85 %	WNW	2.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:39 PM	79.9 °F	75.0 °F	85 %	WNW	1.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:44 PM	79.8 °F	75.0 °F	85 %	WNW	1.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:49 PM	79.6 °F	75.0 °F	85 %	WNW	1.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:54 PM	79.4 °F	75.0 °F	86 %	WNW	2.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:59 PM	79.2 °F	75.0 °F	86 %	WNW	2.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:04 PM	79.0 °F	75.0 °F	87 %	WNW	2.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:09 PM	78.6 °F	74.6 °F	87 %	WNW	1.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:14 PM	78.4 °F	74.6 °F	88 %	WNW	2.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:19 PM	78.5 °F	75.0 °F	88 %	WSW	2.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:24 PM	78.5 °F	75.0 °F	88 %	WSW	2.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:29 PM	78.4 °F	75.0 °F	88 %	WSW	1.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:34 PM	78.4 °F	75.0 °F	88 %	WSW	0.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:39 PM	78.3 °F	74.5 °F	88 %	WSW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:44 PM	78.2 °F	74.0 °F	88 %	WSW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:49 PM	78.2 °F	74.0 °F	88 %	WSW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:54 PM	78.0 °F	74.1 °F	88 %	WSW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:59 PM	77.8 °F	74.1 °F	89 %	WSW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:04 AM	77.7 °F	74.0 °F	89 %	West	1.6 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:09 AM	77.8 °F	74.5 °F	89 %	West	3.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:14 AM	77.8 °F	74.0 °F	89 %	West	2.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:19 AM	77.8 °F	74.4 °F	89 %	West	3.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:24 AM	77.8 °F	74.0 °F	89 %	West	3.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:29 AM	77.7 °F	74.7 °F	90 %	West	2.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:34 AM	77.6 °F	75.0 °F	90 %	West	1.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:39 AM	77.5 °F	74.1 °F	90 %	West	2.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		12:44 AM	77.4 °F	74.0 °F	90 %	West	3.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:49 AM	77.2 °F	74.0 °F	90 %	West	2.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:54 AM	77.2 °F	74.6 °F	91 %	West	2.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:59 AM	77.3 °F	75.0 °F	91 %	West	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:04 AM	77.3 °F	75.0 °F	91 %	West	2.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:09 AM	77.3 °F	75.0 °F	91 %	West	2.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:14 AM	77.2 °F	75.0 °F	91 %	West	2.6 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		1:19 AM	77.1 °F	74.2 °F	91 %	West	2.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
9	6/6/2025 - 6/7/2025	1:24 AM	76.8 °F	74.0 °F	91 %	WSW	2.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in	1-2, 7-29	Yes
		1:29 AM	76.7 °F	74.0 °F	91 %	SSW	2.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:34 AM	76.7 °F	74.0 °F	92 %	SSW	2.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:39 AM	76.7 °F	74.0 °F	92 %	SSW	1.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:44 AM	76.7 °F	74.0 °F	92 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:49 AM	76.5 °F	74.0 °F	92 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:54 AM	76.3 °F	74.0 °F	92 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:59 AM	76.3 °F	74.0 °F	92 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:04 AM	76.3 °F	74.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:09 AM	76.4 °F	74.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:14 AM	76.4 °F	74.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:19 AM	76.4 °F	74.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:24 AM	76.5 °F	74.5 °F	93 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:29 AM	76.6 °F	74.9 °F	93 %	SSW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		2:34 AM	76.6 °F	74.0 °F	92 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		2:39 AM	76.6 °F	74.0 °F	92 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		2:44 AM	76.7 °F	74.0 °F	92 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		2:49 AM	76.7 °F	74.0 °F	92 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		2:54 AM	76.6 °F	74.2 °F	92 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		2:59 AM	76.4 °F	74.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:04 AM	76.1 °F	74.0 °F	92 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:09 AM	76.0 °F	74.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:14 AM	75.9 °F	74.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:19 AM	75.7 °F	74.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:24 AM	75.7 °F	74.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:29 AM	75.6 °F	73.8 °F	93 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:34 AM	75.5 °F	73.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:39 AM	75.4 °F	73.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:44 AM	75.3 °F	73.0 °F	93 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:49 AM	75.3 °F	73.8 °F	94 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:54 AM	75.3 °F	73.7 °F	94 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:59 AM	75.3 °F	73.6 °F	94 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:04 AM	75.3 °F	73.7 °F	94 %	SSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:09 AM	75.3 °F	73.5 °F	94 %	SSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:14 AM	75.1 °F	73.0 °F	94 %	SSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:19 AM	75.1 °F	73.0 °F	94 %	SSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:24 AM	75.1 °F	73.0 °F	94 %	SSW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:29 AM	75.1 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:34 AM	74.9 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:39 AM	75.0 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:44 AM	75.0 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:49 AM	74.8 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:54 AM	74.9 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:59 AM	74.8 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:04 AM	74.6 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:09 AM	74.7 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:14 AM	74.5 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:19 AM	74.2 °F	72.1 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:24 AM	74.1 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:29 AM	74.2 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:34 AM	74.1 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:39 AM	74.0 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:44 AM	73.9 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:49 AM	74.1 °F	72.1 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:54 AM	73.9 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:59 AM	73.8 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		6:04 AM	73.8 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		6:09 AM	73.8 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		6:14 AM	73.9 °F	72.4 °F	95 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		6:19 AM	73.7 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		6:24 AM	73.7 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		6:29 AM	73.6 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:34 AM	73.8 °F	72.1 °F	95 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:39 AM	73.8 °F	72.3 °F	95 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:44 AM	73.2 °F	71.8 °F	95 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:49 AM	73.2 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:54 AM	73.2 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:59 AM	73.1 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		7:04 AM	73.2 °F	72.0 °F	95 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:20 PM											
		7:49 PM	84.8 °F	74.0 °F	70 %	WSW	7.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		7:54 PM	84.5 °F	74.0 °F	71 %	WSW	6.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		7:59 PM	84.1 °F	74.0 °F	72 %	WSW	5.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		8:04 PM	83.8 °F	74.0 °F	72 %	WSW	6.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		8:09 PM	83.7 °F	74.0 °F	72 %	WSW	6.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		8:14 PM	83.4 °F	74.0 °F	73 %	WSW	5.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:19 PM	83.1 °F	74.0 °F	73 %	WSW	4.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:24 PM	82.7 °F	73.9 °F	74 %	WSW	4.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:29 PM	82.5 °F	74.0 °F	75 %	West	5.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:34 PM	82.3 °F	74.0 °F	75 %	WSW	4.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:39 PM	82.0 °F	73.7 °F	75 %	WSW	4.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:44 PM	81.8 °F	73.6 °F	76 %	WSW	4.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:49 PM	81.5 °F	73.4 °F	76 %	WSW	4.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:54 PM	81.2 °F	73.2 °F	77 %	WSW	4.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:59 PM	80.9 °F	73.0 °F	78 %	WSW	4.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		9:04 PM	80.6 °F	73.0 °F	78 %	WSW	4.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		9:09 PM	80.3 °F	73.0 °F	79 %	WSW	4.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		9:14 PM	80.2 °F	73.0 °F	79 %	WSW	4.2 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:19 PM	79.9 °F	73.0 °F	80 %	WSW	3.6 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:24 PM	79.9 °F	73.0 °F	80 %	WSW	3.7 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:29 PM	79.9 °F	73.0 °F	80 %	West	3.6 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:34 PM	79.7 °F	73.0 °F	80 %	WSW	3.3 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:39 PM	79.5 °F	73.0 °F	81 %	SW	3.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:44 PM	79.1 °F	73.0 °F	82 %	SW	3.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:49 PM	78.9 °F	73.0 °F	82 %	SW	3.4 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:54 PM	78.6 °F	73.0 °F	82 %	SW	2.9 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:59 PM	78.4 °F	73.0 °F	83 %	WSW	3.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		10:04 PM	78.4 °F	73.0 °F	83 %	WSW	3.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		10:09 PM	78.4 °F	73.0 °F	83 %	WSW	3.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:14 PM	78.2 °F	73.0 °F	83 %	SW	3.1 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		10:19 PM	78.1 °F	73.0 °F	83 %	SW	2.7 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		10:24 PM	77.9 °F	73.0 °F	84 %	SW	2.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:29 PM	77.7 °F	73.0 °F	84 %	SW	3.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:34 PM	77.6 °F	72.7 °F	84 %	SW	2.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:39 PM	77.4 °F	72.2 °F	84 %	SW	2.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:44 PM	77.3 °F	73.0 °F	85 %	SW	2.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:49 PM	77.2 °F	72.1 °F	85 %	SW	2.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:54 PM	77.1 °F	72.0 °F	85 %	SW	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:59 PM	76.9 °F	72.0 °F	85 %	SW	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:04 PM	76.7 °F	72.0 °F	85 %	SW	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:09 PM	76.4 °F	72.0 °F	86 %	SW	1.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:14 PM	76.1 °F	72.0 °F	87 %	SW	1.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:19 PM	76.2 °F	72.0 °F	87 %	SW	1.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:24 PM	76.2 °F	72.0 °F	87 %	SW	0.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:29 PM	76.2 °F	72.0 °F	87 %	SW	0.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:34 PM	76.0 °F	72.0 °F	87 %	SW	2.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:39 PM	75.9 °F	72.0 °F	87 %	SW	2.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:44 PM	75.6 °F	72.0 °F	88 %	SW	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:49 PM	75.6 °F	72.0 °F	88 %	SW	2.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:54 PM	75.8 °F	72.0 °F	88 %	SW	2.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:59 PM	75.8 °F	72.0 °F	88 %	SW	1.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:04 AM	75.6 °F	72.0 °F	88 %	SW	0.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:09 AM	75.4 °F	72.0 °F	88 %	SW	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:14 AM	75.1 °F	71.8 °F	89 %	SW	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:19 AM	74.9 °F	72.0 °F	89 %	SW	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:24 AM	75.0 °F	72.0 °F	89 %	SW	0.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:29 AM	75.2 °F	72.0 °F	89 %	SW	1.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:34 AM	75.3 °F	72.0 °F	89 %	SW	0.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:39 AM	75.2 °F	72.0 °F	89 %	SW	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		12:44 AM	74.8 °F	71.3 °F	89 %	SW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:49 AM	74.7 °F	71.3 °F	89 %	SW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:54 AM	74.6 °F	71.1 °F	89 %	SW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:59 AM	74.3 °F	71.0 °F	90 %	SW	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:04 AM	74.2 °F	71.0 °F	90 %	SW	1.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:09 AM	74.0 °F	71.0 °F	90 %	SW	1.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:14 AM	74.1 °F	71.1 °F	90 %	SW	0.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:19 AM	74.2 °F	71.6 °F	91 %	SW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
10	6/7/2025 - 6/8/2025	1:24 AM	74.1 °F	71.0 °F	90 %	SW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in	1-2, 7-29	Yes
		1:29 AM	73.8 °F	71.0 °F	90 %	SW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:34 AM	73.7 °F	71.0 °F	91 %	SW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:39 AM	73.5 °F	71.0 °F	91 %	SW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:44 AM	73.5 °F	71.0 °F	91 %	SW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:49 AM	73.4 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:54 AM	73.3 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		1:59 AM	73.3 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:04 AM	73.3 °F	71.0 °F	92 %	SW	0.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:09 AM	73.2 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:14 AM	73.3 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:19 AM	73.3 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:24 AM	73.3 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:29 AM	73.3 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:34 AM	73.2 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		2:39 AM	73.1 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:44 AM	73.0 °F	71.0 °F	92 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:49 AM	73.1 °F	71.0 °F	92 %	SW	0.7 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:54 AM	72.9 °F	71.0 °F	92 %	SW	2.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		2:59 AM	72.8 °F	70.9 °F	93 %	SW	1.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:04 AM	72.7 °F	70.8 °F	93 %	SW	0.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:09 AM	72.7 °F	71.0 °F	93 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		3:14 AM	72.7 °F	71.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:19 AM	72.9 °F	71.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:24 AM	72.7 °F	70.9 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:29 AM	72.3 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:34 AM	72.2 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:39 AM	72.4 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:44 AM	72.4 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:49 AM	72.4 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:54 AM	72.3 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		3:59 AM	72.3 °F	70.1 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:04 AM	72.2 °F	70.1 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:09 AM	72.1 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:14 AM	72.3 °F	70.8 °F	94 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:19 AM	72.3 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:24 AM	72.4 °F	70.7 °F	94 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:29 AM	72.3 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		4:34 AM	72.1 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:39 AM	72.2 °F	70.0 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:44 AM	72.2 °F	70.0 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:49 AM	72.2 °F	70.2 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:54 AM	72.4 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:59 AM	72.2 °F	70.3 °F	94 %	SW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:04 AM	72.1 °F	70.0 °F	93 %	SW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:09 AM	72.3 °F	70.6 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:14 AM	72.3 °F	70.9 °F	94 %	SW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:19 AM	72.3 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:24 AM	72.3 °F	70.5 °F	94 %	SW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		5:29 AM	72.3 °F	70.5 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:34 AM	72.3 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:39 AM	72.4 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:44 AM	72.3 °F	70.5 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:49 AM	72.6 °F	71.0 °F	94 %	SW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:54 AM	72.3 °F	70.8 °F	94 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:59 AM	72.3 °F	70.6 °F	94 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:04 AM	71.9 °F	70.0 °F	94 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:09 AM	72.3 °F	70.5 °F	94 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:14 AM	72.2 °F	70.4 °F	94 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:19 AM	72.1 °F	70.1 °F	94 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:24 AM	72.0 °F	70.0 °F	94 %	SW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		6:29 AM	71.8 °F	70.0 °F	94 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:34 AM	72.0 °F	70.0 °F	94 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:39 AM	72.5 °F	70.9 °F	95 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:44 AM	72.3 °F	70.6 °F	94 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:49 AM	72.1 °F	70.0 °F	94 %	SW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:54 AM	72.2 °F	70.0 °F	94 %	South	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:59 AM	72.3 °F	70.5 °F	94 %	South	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		7:04 AM	72.5 °F	71.0 °F	94 %	SSE	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:21 PM											
		7:49 PM	85.1 °F	74.0 °F	69 %	West	6.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		7:54 PM	84.8 °F	74.0 °F	70 %	West	6.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		7:59 PM	84.5 °F	74.0 °F	71 %	West	4.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:04 PM	84.3 °F	74.0 °F	71 %	West	6.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:09 PM	84.0 °F	74.0 °F	72 %	West	6.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:14 PM	83.6 °F	74.0 °F	73 %	West	6.9 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:19 PM	83.4 °F	74.0 °F	73 %	West	6.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:24 PM	83.1 °F	74.0 °F	74 %	West	6.6 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:29 PM	82.8 °F	74.0 °F	75 %	West	5.3 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:34 PM	82.5 °F	74.0 °F	75 %	West	4.5 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:39 PM	82.4 °F	74.0 °F	76 %	WSW	2.9 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:44 PM	82.1 °F	74.0 °F	76 %	WSW	2.4 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:49 PM	82.0 °F	74.0 °F	77 %	WSW	2.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:54 PM	81.7 °F	74.0 °F	77 %	WSW	2.4 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		8:59 PM	81.5 °F	74.0 °F	78 %	WSW	2.3 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:04 PM	81.3 °F	74.0 °F	79 %	WSW	3.4 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:09 PM	81.2 °F	74.0 °F	79 %	West	2.9 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		9:14 PM	81.0 °F	74.0 °F	80 %	WNW	2.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:19 PM	80.9 °F	74.0 °F	80 %	WNW	2.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:24 PM	80.7 °F	74.0 °F	81 %	WNW	2.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:29 PM	80.5 °F	74.0 °F	81 %	West	2.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:34 PM	80.3 °F	74.0 °F	82 %	West	1.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:39 PM	80.2 °F	74.0 °F	82 %	West	0.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:44 PM	79.9 °F	74.0 °F	82 %	West	1.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:49 PM	79.6 °F	74.0 °F	83 %	West	2.2 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:54 PM	79.3 °F	74.0 °F	83 %	West	2.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		9:59 PM	78.5 °F	73.3 °F	84 %	West	1.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		10:04 PM	78.3 °F	73.4 °F	85 %	West	1.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		10:09 PM	78.3 °F	73.9 °F	85 %	West	0.6 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		10:14 PM	78.1 °F	74.0 °F	86 %	West	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:19 PM	77.9 °F	73.6 °F	86 %	West	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:24 PM	77.8 °F	73.0 °F	86 %	West	0.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:29 PM	77.7 °F	73.0 °F	86 %	SSW	1.9 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:34 PM	77.7 °F	73.6 °F	87 %	South	1.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:39 PM	77.5 °F	73.0 °F	86 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:44 PM	76.7 °F	73.0 °F	87 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:49 PM	76.7 °F	73.0 °F	88 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:54 PM	76.8 °F	73.0 °F	88 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		10:59 PM	76.7 °F	73.0 °F	88 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:04 PM	76.6 °F	73.0 °F	88 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:09 PM	76.5 °F	73.0 °F	89 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:14 PM	76.7 °F	73.0 °F	89 %	South	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:19 PM	76.9 °F	73.6 °F	89 %	SW	1.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:24 PM	76.8 °F	73.4 °F	89 %	SW	3.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:29 PM	76.5 °F	73.0 °F	89 %	SSW	3.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:34 PM	76.3 °F	73.0 °F	89 %	SSW	3.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:39 PM	76.3 °F	73.0 °F	90 %	SSW	1.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:44 PM	76.1 °F	73.0 °F	89 %	SSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:49 PM	76.1 °F	73.0 °F	90 %	SSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:54 PM	76.3 °F	73.0 °F	90 %	SSW	0.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		11:59 PM	76.1 °F	73.0 °F	90 %	SSW	1.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:04 AM	75.9 °F	73.0 °F	90 %	SSW	1.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:09 AM	75.9 °F	73.0 °F	90 %	SSW	1.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:14 AM	76.1 °F	73.0 °F	90 %	SSW	1.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:19 AM	75.8 °F	73.0 °F	90 %	SSW	0.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:24 AM	75.5 °F	73.0 °F	90 %	SSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:29 AM	75.5 °F	72.6 °F	90 %	SSW	0.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:34 AM	75.2 °F	72.0 °F	90 %	SSW	1.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:39 AM	75.0 °F	72.0 °F	91 %	SSW	0.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:44 AM	74.7 °F	72.0 °F	91 %	SSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:49 AM	74.6 °F	72.0 °F	91 %	SSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:54 AM	74.7 °F	72.0 °F	91 %	SSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		12:59 AM	74.6 °F	72.0 °F	91 %	SSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:04 AM	74.8 °F	72.1 °F	92 %	SSW	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		1:09 AM	74.8 °F	72.0 °F	91 %	SSW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:14 AM	74.7 °F	72.0 °F	92 %	SSW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:19 AM	75.0 °F	73.0 °F	92 %	SSW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
11	6/8/2025 - 6/9/2025	1:24 AM	75.0 °F	72.7 °F	92 %	SSW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in	1-2, 7-29	Yes
		1:29 AM	74.7 °F	72.1 °F	92 %	SSW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:34 AM	74.4 °F	72.0 °F	92 %	SSW	0.0 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:39 AM	74.4 °F	72.0 °F	92 %	SSW	0.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:44 AM	74.4 °F	72.0 °F	92 %	SSW	0.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		1:49 AM	74.7 °F	72.0 °F	92 %	SSW	0.9 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		1:54 AM	74.6 °F	72.0 °F	92 %	SSW	0.1 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		1:59 AM	74.3 °F	72.0 °F	92 %	SSW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:04 AM	74.4 °F	72.0 °F	93 %	SSW	0.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:09 AM	74.5 °F	72.1 °F	93 %	SSW	1.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:14 AM	74.6 °F	72.5 °F	93 %	SSW	0.3 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:19 AM	74.5 °F	72.4 °F	93 %	SSW	1.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:24 AM	74.4 °F	72.0 °F	93 %	SSW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:29 AM	74.3 °F	72.0 °F	93 %	SSW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:34 AM	74.3 °F	72.0 °F	93 %	SSW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:39 AM	74.2 °F	72.0 °F	93 %	SSW	0.0 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		2:44 AM	74.3 °F	72.0 °F	93 %	SSW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:49 AM	73.9 °F	72.0 °F	93 %	SSW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:54 AM	73.8 °F	72.0 °F	93 %	SSW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		2:59 AM	73.9 °F	72.0 °F	93 %	SSW	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:04 AM	73.8 °F	72.0 °F	93 %	SSW	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:09 AM	73.7 °F	72.0 °F	93 %	South	0.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:14 AM	73.8 °F	72.0 °F	94 %	East	1.5 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:19 AM	73.9 °F	72.0 °F	93 %	ESE	1.6 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:24 AM	73.8 °F	72.0 °F	94 %	ESE	1.8 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:29 AM	73.8 °F	72.0 °F	94 %	ESE	1.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		3:34 AM	73.7 °F	72.0 °F	94 %	ESE	1.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:39 AM	73.6 °F	72.0 °F	94 %	ESE	1.3 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:44 AM	73.9 °F	72.0 °F	94 %	ESE	0.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:49 AM	73.8 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:54 AM	73.9 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		3:59 AM	73.8 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:04 AM	73.7 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:09 AM	73.9 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:14 AM	73.8 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:19 AM	73.8 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:24 AM	73.6 °F	72.0 °F	94 %	ESE	0.0 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:29 AM	73.8 °F	72.0 °F	94 %	ENE	0.1 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:34 AM	74.0 °F	72.0 °F	94 %	North	1.2 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:39 AM	74.1 °F	72.0 °F	94 %	North	1.5 mph	0.0 mph	29.96 in	0.00 in	0.00 in		
		4:44 AM	74.2 °F	72.2 °F	94 %	NNE	1.7 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:49 AM	74.3 °F	73.0 °F	95 %	NE	1.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:54 AM	74.4 °F	73.0 °F	95 %	NE	0.4 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		4:59 AM	74.5 °F	73.0 °F	95 %	NE	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:04 AM	74.7 °F	73.0 °F	95 %	NE	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:09 AM	74.8 °F	73.0 °F	95 %	ENE	0.0 mph	0.0 mph	29.97 in	0.00 in	0.00 in		
		5:14 AM	74.7 °F	73.0 °F	95 %	ENE	0.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:19 AM	74.6 °F	73.0 °F	94 %	East	2.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:24 AM	74.6 °F	73.0 °F	94 %	ENE	1.8 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:29 AM	74.6 °F	73.0 °F	94 %	ENE	2.2 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:34 AM	74.5 °F	73.0 °F	94 %	ENE	1.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:39 AM	74.5 °F	73.0 °F	94 %	ENE	1.9 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:44 AM	74.6 °F	73.0 °F	94 %	ENE	2.7 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:49 AM	74.6 °F	73.0 °F	94 %	East	3.3 mph	0.0 mph	29.98 in	0.00 in	0.00 in		
		5:54 AM	74.7 °F	73.0 °F	94 %	East	2.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		5:59 AM	74.7 °F	73.0 °F	94 %	East	2.8 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:04 AM	74.7 °F	73.0 °F	94 %	East	3.5 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		6:09 AM	74.7 °F	73.0 °F	94 %	East	2.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:14 AM	74.6 °F	73.0 °F	94 %	East	2.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:19 AM	74.7 °F	73.0 °F	94 %	East	0.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:24 AM	74.6 °F	73.0 °F	94 %	East	2.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:29 AM	74.6 °F	73.0 °F	94 %	East	2.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:34 AM	74.7 °F	73.0 °F	94 %	ENE	2.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:39 AM	74.7 °F	73.0 °F	94 %	ENE	1.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:44 AM	74.6 °F	73.0 °F	94 %	ENE	2.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:49 AM	74.5 °F	73.0 °F	94 %	ENE	2.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:54 AM	74.5 °F	73.0 °F	94 %	ENE	1.4 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		6:59 AM	74.6 °F	73.0 °F	94 %	ENE	0.6 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		7:04 AM	74.6 °F	73.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:21 PM											
		7:49 PM	82.2 °F	73.0 °F	73 %	NE	3.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		7:54 PM	82.0 °F	73.0 °F	74 %	ENE	3.1 mph	0.0 mph	29.99 in	0.00 in	0.00 in		
		7:59 PM	81.8 °F	73.0 °F	75 %	East	2.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:04 PM	81.8 °F	73.0 °F	75 %	ESE	3.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:09 PM	81.4 °F	73.0 °F	76 %	East	4.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:14 PM	81.2 °F	73.0 °F	76 %	ESE	4.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:19 PM	81.1 °F	73.0 °F	77 %	ESE	5.5 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:24 PM	81.0 °F	73.0 °F	76 %	ESE	5.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:29 PM	81.2 °F	73.0 °F	76 %	ESE	3.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:34 PM	81.2 °F	73.0 °F	75 %	ESE	5.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:39 PM	81.4 °F	73.0 °F	75 %	ESE	4.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:44 PM	81.4 °F	73.0 °F	76 %	ESE	3.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:49 PM	81.4 °F	73.0 °F	76 %	ESE	3.7 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:54 PM	81.4 °F	73.0 °F	76 %	SE	2.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		8:59 PM	81.3 °F	73.0 °F	76 %	SE	3.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		9:04 PM	81.0 °F	73.2 °F	77 %	SE	4.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		9:09 PM	80.9 °F	73.0 °F	78 %	SE	4.6 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		9:14 PM	80.8 °F	73.9 °F	79 %	SSE	3.3 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		9:19 PM	80.4 °F	73.6 °F	80 %	SSE	3.2 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:24 PM	80.0 °F	73.5 °F	80 %	SSE	1.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:29 PM	79.8 °F	73.9 °F	81 %	SSE	1.6 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		9:34 PM	79.9 °F	74.0 °F	81 %	SE	1.8 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:39 PM	80.0 °F	74.0 °F	81 %	SE	0.6 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:44 PM	79.6 °F	73.6 °F	82 %	SE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		9:49 PM	79.1 °F	73.7 °F	83 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		9:54 PM	78.9 °F	73.8 °F	84 %	SE	0.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		9:59 PM	78.9 °F	73.8 °F	83 %	SE	2.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:04 PM	78.9 °F	73.1 °F	83 %	ESE	3.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:09 PM	78.9 °F	73.0 °F	83 %	ESE	4.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:14 PM	78.9 °F	73.0 °F	83 %	SE	4.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:19 PM	78.8 °F	73.0 °F	83 %	ESE	4.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:24 PM	78.9 °F	73.1 °F	83 %	SE	3.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:29 PM	78.8 °F	73.0 °F	83 %	ESE	3.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:34 PM	78.6 °F	73.2 °F	84 %	ESE	1.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:39 PM	78.6 °F	73.1 °F	84 %	SE	0.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		10:44 PM	78.5 °F	73.0 °F	84 %	ESE	3.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:49 PM	78.3 °F	73.0 °F	84 %	ESE	4.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:54 PM	78.2 °F	73.0 °F	85 %	ESE	3.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:59 PM	78.0 °F	73.0 °F	85 %	ESE	3.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:04 PM	77.8 °F	73.0 °F	85 %	ESE	2.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:09 PM	77.8 °F	73.0 °F	85 %	ESE	2.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:14 PM	77.7 °F	73.0 °F	85 %	ESE	1.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:19 PM	77.8 °F	73.0 °F	85 %	ESE	0.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:24 PM	77.8 °F	73.0 °F	85 %	ESE	1.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:29 PM	77.7 °F	73.0 °F	85 %	ESE	0.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:34 PM	77.8 °F	73.0 °F	85 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		11:39 PM	77.7 °F	73.0 °F	85 %	SE	2.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		11:44 PM	77.4 °F	73.0 °F	86 %	SE	2.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		11:49 PM	77.1 °F	73.0 °F	86 %	SSE	0.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		11:54 PM	77.1 °F	73.0 °F	86 %	SSE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		11:59 PM	77.1 °F	73.0 °F	86 %	SSE	0.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:04 AM	76.9 °F	73.0 °F	86 %	SSE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:09 AM	76.6 °F	72.0 °F	86 %	SSE	1.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:14 AM	76.3 °F	72.0 °F	87 %	SE	2.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:19 AM	76.3 °F	72.0 °F	87 %	ESE	3.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:24 AM	76.4 °F	72.0 °F	87 %	ESE	4.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:29 AM	76.4 °F	72.0 °F	87 %	ESE	4.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:34 AM	76.3 °F	72.0 °F	87 %	ESE	4.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:39 AM	76.1 °F	72.0 °F	87 %	ESE	6.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:44 AM	75.9 °F	72.0 °F	87 %	ESE	6.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:49 AM	75.9 °F	72.0 °F	88 %	ESE	6.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:54 AM	75.8 °F	72.0 °F	88 %	ESE	5.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		12:59 AM	75.8 °F	72.0 °F	88 %	SE	5.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:04 AM	75.8 °F	72.0 °F	88 %	SE	4.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:09 AM	75.8 °F	72.0 °F	88 %	ESE	5.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:14 AM	75.8 °F	72.0 °F	88 %	SE	3.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:19 AM	75.6 °F	72.0 °F	88 %	SE	4.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:24 AM	75.5 °F	72.0 °F	89 %	SE	4.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
12	6/9/2025 - 6/10/2025	1:29 AM	75.5 °F	72.0 °F	89 %	SE	4.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in	1-2, 7-29	Yes
		1:34 AM	75.4 °F	72.0 °F	89 %	SSE	4.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		1:39 AM	75.3 °F	72.0 °F	88 %	SSE	3.7 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		1:44 AM	75.2 °F	72.0 °F	89 %	South	3.4 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		1:49 AM	75.2 °F	72.0 °F	89 %	South	4.1 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		1:54 AM	75.3 °F	72.0 °F	89 %	SSE	5.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		1:59 AM	75.3 °F	72.0 °F	89 %	SSE	4.5 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:04 AM	75.3 °F	72.0 °F	89 %	SSE	4.1 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:09 AM	75.3 °F	72.0 °F	89 %	SE	3.5 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:14 AM	75.3 °F	72.0 °F	88 %	SE	4.1 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:19 AM	75.3 °F	72.0 °F	88 %	SE	3.4 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:24 AM	75.3 °F	72.0 °F	88 %	SSE	3.6 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:29 AM	75.2 °F	71.7 °F	88 %	SE	3.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:34 AM	75.2 °F	71.5 °F	88 %	ESE	2.9 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:39 AM	75.3 °F	72.0 °F	88 %	SE	3.4 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:44 AM	75.2 °F	72.0 °F	88 %	SE	3.2 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:49 AM	75.2 °F	71.6 °F	88 %	SE	2.4 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:54 AM	75.1 °F	71.0 °F	88 %	SE	2.2 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		2:59 AM	74.9 °F	71.8 °F	89 %	ESE	1.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:04 AM	74.9 °F	72.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:09 AM	74.8 °F	71.3 °F	89 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:14 AM	74.7 °F	71.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:19 AM	74.7 °F	71.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:24 AM	74.6 °F	71.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:29 AM	74.5 °F	71.0 °F	89 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:34 AM	74.2 °F	71.0 °F	90 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:39 AM	73.9 °F	71.0 °F	90 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:44 AM	73.5 °F	71.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:49 AM	73.3 °F	71.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:54 AM	73.4 °F	71.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		3:59 AM	73.1 °F	70.3 °F	91 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:04 AM	72.9 °F	70.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:09 AM	73.0 °F	70.0 °F	91 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:14 AM	73.1 °F	70.9 °F	92 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:19 AM	73.0 °F	71.0 °F	92 %	ESE	0.2 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:24 AM	72.9 °F	71.0 °F	92 %	ESE	2.9 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:29 AM	73.0 °F	71.0 °F	92 %	ESE	3.1 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:34 AM	73.0 °F	71.0 °F	92 %	ESE	2.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:39 AM	72.9 °F	71.0 °F	92 %	ESE	0.8 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:44 AM	72.9 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.00 in	0.00 in	0.00 in		
		4:49 AM	73.0 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:54 AM	73.0 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:59 AM	73.0 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:04 AM	73.0 °F	71.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:09 AM	72.7 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:14 AM	72.5 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:19 AM	72.4 °F	70.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:24 AM	72.4 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:29 AM	72.3 °F	70.0 °F	93 %	ESE	1.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:34 AM	72.3 °F	70.0 °F	93 %	ESE	2.3 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:39 AM	72.6 °F	70.7 °F	93 %	East	2.8 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		5:44 AM	72.3 °F	70.1 °F	93 %	East	3.5 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:49 AM	72.0 °F	70.0 °F	92 %	East	4.0 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:54 AM	72.2 °F	70.0 °F	93 %	East	4.1 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		5:59 AM	72.3 °F	70.0 °F	93 %	ESE	3.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:04 AM	72.3 °F	70.0 °F	93 %	ESE	3.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:09 AM	72.3 °F	70.0 °F	93 %	ESE	2.8 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:14 AM	72.2 °F	70.0 °F	93 %	ESE	2.1 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:19 AM	72.3 °F	70.0 °F	93 %	ESE	1.9 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:24 AM	72.2 °F	70.0 °F	93 %	ESE	1.4 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:29 AM	72.2 °F	70.0 °F	93 %	ESE	1.1 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		6:34 AM	72.3 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:39 AM	72.2 °F	70.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:44 AM	72.2 °F	70.0 °F	93 %	ESE	1.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:49 AM	72.2 °F	70.0 °F	93 %	ESE	2.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:54 AM	72.2 °F	70.0 °F	93 %	ESE	2.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:59 AM	72.3 °F	70.0 °F	93 %	ESE	2.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		7:04 AM	72.5 °F	70.4 °F	93 %	ESE	0.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data

Stations 1-2, 7-29

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:21 PM											
		7:49 PM	81.0 °F	71.8 °F	73 %	ESE	7.2 mph	0.0 mph	30.03 in	0.00 in	0.01 in		
		7:54 PM	80.4 °F	71.1 °F	74 %	ESE	7.5 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		7:59 PM	80.1 °F	71.2 °F	75 %	ESE	4.8 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:04 PM	79.9 °F	71.6 °F	76 %	ESE	2.6 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:09 PM	79.7 °F	72.0 °F	77 %	East	4.7 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:14 PM	79.2 °F	72.0 °F	79 %	East	4.1 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:19 PM	78.8 °F	72.0 °F	80 %	ESE	4.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:24 PM	78.4 °F	72.0 °F	81 %	East	5.5 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:29 PM	77.8 °F	72.0 °F	82 %	East	6.4 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:34 PM	77.2 °F	72.0 °F	83 %	East	4.9 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:39 PM	76.8 °F	72.0 °F	84 %	ENE	4.7 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:44 PM	76.4 °F	71.7 °F	85 %	ENE	4.7 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:49 PM	76.2 °F	71.3 °F	85 %	ENE	4.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:54 PM	76.0 °F	71.6 °F	86 %	ENE	2.5 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:59 PM	75.8 °F	71.1 °F	86 %	East	2.6 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		9:04 PM	75.5 °F	71.0 °F	86 %	East	2.3 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		9:09 PM	75.3 °F	71.0 °F	87 %	ENE	1.7 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:14 PM	75.3 °F	71.0 °F	87 %	ENE	0.2 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:19 PM	75.1 °F	71.0 °F	87 %	ENE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:24 PM	75.0 °F	71.0 °F	88 %	ENE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:29 PM	74.9 °F	71.0 °F	88 %	ENE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:34 PM	74.9 °F	71.0 °F	88 %	NNE	0.7 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:39 PM	74.9 °F	71.0 °F	88 %	North	2.0 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:44 PM	74.9 °F	71.0 °F	88 %	NNE	3.0 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:49 PM	74.8 °F	71.0 °F	88 %	ENE	3.0 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:54 PM	74.4 °F	71.0 °F	88 %	ENE	3.0 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		9:59 PM	74.3 °F	71.0 °F	88 %	ENE	3.3 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:04 PM	74.4 °F	71.0 °F	88 %	NE	2.3 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:09 PM	74.2 °F	71.0 °F	89 %	NNE	3.4 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:14 PM	74.2 °F	71.0 °F	89 %	NE	4.0 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:19 PM	74.2 °F	71.0 °F	89 %	East	3.6 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:24 PM	74.0 °F	71.0 °F	89 %	East	4.2 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:29 PM	73.9 °F	70.8 °F	89 %	ESE	3.1 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		10:34 PM	73.8 °F	70.2 °F	89 %	East	2.2 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		10:39 PM	73.8 °F	70.0 °F	89 %	East	1.6 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		10:44 PM	73.6 °F	70.8 °F	90 %	NE	1.8 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		10:49 PM	73.5 °F	70.6 °F	90 %	NNE	1.4 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		10:54 PM	73.5 °F	71.0 °F	90 %	NNE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		10:59 PM	73.7 °F	71.0 °F	90 %	NE	0.8 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:04 PM	73.7 °F	71.0 °F	90 %	NE	1.5 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:09 PM	73.4 °F	70.2 °F	90 %	NE	1.6 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:14 PM	73.4 °F	70.2 °F	90 %	East	2.2 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:19 PM	73.3 °F	70.0 °F	90 %	East	2.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:24 PM	73.4 °F	70.0 °F	90 %	East	1.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:29 PM	73.3 °F	70.0 °F	90 %	East	0.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:34 PM	73.2 °F	70.0 °F	90 %	East	0.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:39 PM	73.2 °F	70.0 °F	90 %	East	0.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:44 PM	73.1 °F	70.0 °F	91 %	East	0.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:49 PM	73.2 °F	70.6 °F	91 %	SE	1.1 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:54 PM	73.0 °F	70.0 °F	90 %	SE	2.3 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:59 PM	72.9 °F	70.0 °F	91 %	SE	1.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:04 AM	73.2 °F	70.7 °F	91 %	ESE	2.5 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:09 AM	73.1 °F	70.3 °F	91 %	East	1.6 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:14 AM	72.9 °F	70.0 °F	91 %	East	1.4 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:19 AM	72.7 °F	70.0 °F	91 %	ENE	2.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:24 AM	72.6 °F	70.0 °F	91 %	ENE	2.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:29 AM	72.5 °F	70.0 °F	91 %	East	2.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:34 AM	72.4 °F	70.0 °F	92 %	East	1.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:39 AM	72.6 °F	70.0 °F	92 %	NE	1.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:44 AM	72.5 °F	70.0 °F	92 %	NE	2.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:49 AM	72.6 °F	70.0 °F	92 %	ENE	2.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:54 AM	72.5 °F	70.0 °F	92 %	East	1.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:59 AM	72.4 °F	70.0 °F	92 %	East	1.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:04 AM	72.4 °F	70.0 °F	92 %	East	2.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:09 AM	72.4 °F	70.0 °F	92 %	East	2.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:14 AM	72.4 °F	70.0 °F	92 %	East	2.6 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:19 AM	72.4 °F	70.0 °F	92 %	East	2.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
13	6/10/2025 - 6/11/2025	1:24 AM	72.2 °F	70.0 °F	92 %	East	2.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in	1-2, 7-29	Yes
		1:29 AM	72.0 °F	70.0 °F	92 %	East	2.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:34 AM	72.1 °F	70.0 °F	92 %	East	2.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:39 AM	72.1 °F	70.0 °F	92 %	East	1.6 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:44 AM	71.9 °F	70.0 °F	92 %	East	1.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:49 AM	72.0 °F	70.0 °F	92 %	East	1.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:54 AM	72.1 °F	70.0 °F	92 %	East	0.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:59 AM	71.9 °F	70.0 °F	92 %	East	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:04 AM	71.9 °F	70.0 °F	92 %	East	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:09 AM	71.8 °F	69.6 °F	92 %	ENE	0.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:14 AM	71.8 °F	70.0 °F	93 %	ENE	1.8 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:19 AM	71.9 °F	70.0 °F	93 %	ENE	1.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:24 AM	71.9 °F	70.0 °F	93 %	ENE	0.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:29 AM	71.8 °F	70.0 °F	93 %	ENE	0.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:34 AM	71.9 °F	70.0 °F	93 %	ENE	2.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:39 AM	72.0 °F	70.0 °F	93 %	NE	2.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:44 AM	71.9 °F	70.0 °F	93 %	ENE	2.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:49 AM	71.9 °F	70.0 °F	93 %	ENE	1.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:54 AM	71.9 °F	70.0 °F	93 %	ENE	1.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:59 AM	72.0 °F	70.0 °F	93 %	ENE	1.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:04 AM	71.9 °F	70.0 °F	93 %	NE	2.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:09 AM	71.9 °F	70.0 °F	93 %	NE	1.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:14 AM	71.7 °F	69.8 °F	93 %	NE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:19 AM	71.6 °F	69.7 °F	93 %	NE	0.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:24 AM	71.6 °F	69.6 °F	93 %	NNE	1.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:29 AM	71.6 °F	70.0 °F	93 %	NE	2.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:34 AM	71.7 °F	70.0 °F	93 %	ENE	3.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:39 AM	71.8 °F	70.0 °F	93 %	ENE	3.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:44 AM	71.7 °F	69.8 °F	93 %	ENE	2.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:49 AM	71.5 °F	69.1 °F	93 %	East	2.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:54 AM	71.5 °F	69.1 °F	93 %	East	2.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:59 AM	71.6 °F	69.7 °F	93 %	East	3.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:04 AM	71.6 °F	69.6 °F	93 %	ESE	4.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:09 AM	71.5 °F	69.0 °F	93 %	East	3.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:14 AM	71.5 °F	69.0 °F	93 %	East	3.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:19 AM	71.5 °F	69.0 °F	93 %	East	2.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:24 AM	71.5 °F	69.0 °F	93 %	East	2.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:29 AM	71.4 °F	69.0 °F	93 %	East	2.6 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:34 AM	71.4 °F	69.0 °F	93 %	East	2.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:39 AM	71.4 °F	69.0 °F	93 %	East	3.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:44 AM	71.5 °F	69.0 °F	93 %	East	3.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:49 AM	71.6 °F	69.5 °F	93 %	East	3.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:54 AM	71.6 °F	70.0 °F	93 %	East	3.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:59 AM	71.6 °F	70.0 °F	93 %	East	3.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:04 AM	71.6 °F	70.0 °F	93 %	East	3.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:09 AM	71.8 °F	70.0 °F	93 %	East	3.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:14 AM	71.7 °F	70.0 °F	93 %	East	2.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:19 AM	71.6 °F	69.8 °F	93 %	East	2.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:24 AM	71.6 °F	70.0 °F	93 %	East	2.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:29 AM	71.7 °F	70.0 °F	93 %	East	0.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:34 AM	71.6 °F	69.9 °F	93 %	ENE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:39 AM	71.8 °F	70.0 °F	94 %	ENE	1.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:44 AM	72.0 °F	70.0 °F	94 %	NE	3.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:49 AM	72.1 °F	70.0 °F	94 %	NE	3.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:54 AM	72.1 °F	70.0 °F	94 %	NE	3.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:59 AM	72.1 °F	70.0 °F	94 %	ENE	3.6 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:04 AM	72.0 °F	70.0 °F	94 %	ENE	4.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:09 AM	71.7 °F	70.0 °F	94 %	East	3.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:14 AM	72.0 °F	70.0 °F	94 %	ENE	3.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:19 AM	72.3 °F	70.8 °F	94 %	ENE	3.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		6:24 AM	72.2 °F	70.2 °F	94 %	East	4.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:29 AM	72.3 °F	70.4 °F	94 %	ENE	4.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:34 AM	72.5 °F	71.0 °F	94 %	ENE	3.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:39 AM	72.6 °F	71.0 °F	94 %	ENE	2.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:44 AM	72.6 °F	71.0 °F	94 %	ENE	2.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:49 AM	72.7 °F	71.0 °F	94 %	ENE	1.9 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:54 AM	72.7 °F	71.0 °F	94 %	ENE	2.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:59 AM	72.8 °F	71.0 °F	94 %	ENE	2.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		7:04 AM	73.0 °F	71.0 °F	94 %	ENE	2.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
Third Deployment - Stations 3-6													
	Sunset	8:23 PM											
1	6/16/2025 - 6/17/2025	7:49 PM	86.1 °F	74.0 °F	67 %	ESE	5.6 mph	0.0 mph	30.02 in	0.00 in	0.01 in	3-6	No - sustained wind speeds greater than 9 mph for more than 30 minutes within first 5 hours of survey
		7:54 PM	86.0 °F	74.0 °F	67 %	ESE	4.6 mph	0.0 mph	30.02 in	0.00 in	0.01 in		
		7:59 PM	85.8 °F	74.0 °F	68 %	ESE	3.7 mph	0.0 mph	30.02 in	0.00 in	0.01 in		
		8:04 PM	85.3 °F	74.0 °F	69 %	ESE	3.3 mph	0.0 mph	30.02 in	0.00 in	0.01 in		
		8:09 PM	85.1 °F	74.0 °F	69 %	ESE	3.2 mph	0.0 mph	30.02 in	0.00 in	0.01 in		
		8:14 PM	84.8 °F	74.0 °F	70 %	ESE	2.4 mph	0.0 mph	30.03 in	0.00 in	0.01 in		
		8:19 PM	84.6 °F	74.0 °F	71 %	ESE	1.9 mph	0.0 mph	30.03 in	0.00 in	0.01 in		
		8:24 PM	84.5 °F	74.0 °F	71 %	SE	3.9 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		8:29 PM	84.1 °F	74.3 °F	73 %	SSE	**11.0 mph**	0.0 mph	30.04 in	0.00 in	0.01 in		
		8:34 PM	83.8 °F	74.0 °F	73 %	SE	**10.5 mph**	0.0 mph	30.04 in	0.00 in	0.01 in		
		8:39 PM	83.6 °F	74.0 °F	73 %	SSE	**11.8 mph**	0.0 mph	30.04 in	0.00 in	0.01 in		
		8:44 PM	83.5 °F	74.0 °F	73 %	SSE	**9.8 mph**	0.0 mph	30.04 in	0.00 in	0.01 in		
		8:49 PM	83.1 °F	73.9 °F	73 %	SSE	**10.3 mph**	0.0 mph	30.03 in	0.00 in	0.01 in		
		8:54 PM	82.6 °F	73.4 °F	74 %	South	9.0 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		8:59 PM	82.2 °F	74.0 °F	76 %	South	7.3 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		9:04 PM	81.7 °F	74.8 °F	79 %	SSW	**9.2 mph**	0.0 mph	30.04 in	0.00 in	0.01 in		
		9:09 PM	80.7 °F	74.6 °F	81 %	South	**9.7 mph**	0.0 mph	30.04 in	0.00 in	0.01 in		
		9:14 PM	80.0 °F	74.0 °F	83 %	SSW	8.0 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		9:19 PM	79.7 °F	74.0 °F	83 %	SSW	8.2 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		9:24 PM	79.4 °F	74.0 °F	84 %	SSW	8.3 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		9:29 PM	79.1 °F	74.0 °F	84 %	SW	5.7 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		9:34 PM	78.8 °F	74.0 °F	85 %	SSW	3.8 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		9:39 PM	78.9 °F	74.0 °F	85 %	SSE	3.9 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		9:44 PM	79.1 °F	74.0 °F	85 %	South	3.8 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		9:49 PM	78.9 °F	74.0 °F	85 %	SSW	2.8 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		9:54 PM	78.6 °F	74.0 °F	85 %	SSW	2.2 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		9:59 PM	78.5 °F	74.0 °F	86 %	SW	3.3 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		10:04 PM	78.4 °F	74.0 °F	86 %	SW	3.2 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		10:09 PM	78.3 °F	74.0 °F	86 %	SW	2.9 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		10:14 PM	78.2 °F	74.0 °F	86 %	SW	2.9 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		10:19 PM	78.2 °F	74.0 °F	87 %	SW	3.4 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		10:24 PM	78.2 °F	74.0 °F	87 %	SSW	5.1 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		10:29 PM	78.1 °F	74.0 °F	87 %	SSW	4.7 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:34 PM	77.9 °F	74.0 °F	87 %	SW	5.2 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:39 PM	77.9 °F	74.0 °F	87 %	SW	3.5 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:44 PM	77.8 °F	74.0 °F	88 %	South	3.4 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:49 PM	77.9 °F	74.0 °F	88 %	South	3.3 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:54 PM	78.0 °F	74.0 °F	88 %	South	2.5 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:59 PM	77.9 °F	74.0 °F	88 %	SSE	5.2 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:04 PM	77.7 °F	74.0 °F	88 %	SSE	4.6 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:09 PM	77.6 °F	74.0 °F	88 %	SSE	3.4 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:14 PM	77.5 °F	74.0 °F	89 %	SSE	3.9 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:19 PM	77.4 °F	74.0 °F	89 %	SSE	2.7 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:24 PM	77.3 °F	74.0 °F	89 %	South	3.4 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:29 PM	77.2 °F	74.0 °F	90 %	SSE	3.7 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:34 PM	77.0 °F	74.0 °F	90 %	SSE	2.9 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:39 PM	76.9 °F	74.0 °F	90 %	SSE	1.5 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:44 PM	76.8 °F	74.0 °F	90 %	SSE	0.7 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:49 PM	76.8 °F	74.0 °F	91 %	SSE	0.1 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:54 PM	76.6 °F	74.0 °F	91 %	SSE	1.1 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		11:59 PM	76.6 °F	74.0 °F	91 %	SSE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:04 AM	76.6 °F	74.0 °F	91 %	SSE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:09 AM	76.6 °F	74.0 °F	91 %	SSE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:14 AM	76.6 °F	74.0 °F	91 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:19 AM	76.5 °F	74.0 °F	91 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:24 AM	76.6 °F	74.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:29 AM	76.6 °F	74.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:34 AM	76.6 °F	74.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:39 AM	76.6 °F	74.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:44 AM	76.7 °F	74.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:49 AM	76.7 °F	74.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:54 AM	76.7 °F	74.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		12:59 AM	76.6 °F	74.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:04 AM	76.6 °F	74.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:09 AM	76.7 °F	74.0 °F	91 %	SSE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:14 AM	76.6 °F	74.0 °F	91 %	SSE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:19 AM	76.3 °F	74.0 °F	91 %	SE	0.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:24 AM	76.2 °F	74.0 °F	92 %	SE	2.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:29 AM	76.1 °F	74.0 °F	92 %	SE	0.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:34 AM	76.0 °F	74.0 °F	92 %	SE	1.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:39 AM	75.9 °F	74.0 °F	92 %	SE	1.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:44 AM	75.8 °F	73.4 °F	92 %	SE	0.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:49 AM	75.7 °F	73.0 °F	92 %	SE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:54 AM	75.6 °F	73.0 °F	92 %	SE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:59 AM	75.5 °F	73.1 °F	93 %	SE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:04 AM	75.6 °F	73.7 °F	93 %	SE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:09 AM	75.4 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:14 AM	75.3 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:19 AM	75.3 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:24 AM	75.2 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:29 AM	75.1 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:34 AM	75.1 °F	73.0 °F	93 %	SE	1.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:39 AM	75.0 °F	73.0 °F	93 %	SE	2.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:44 AM	74.7 °F	73.0 °F	93 %	SE	2.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:49 AM	74.4 °F	72.0 °F	93 %	SE	2.8 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:54 AM	74.5 °F	72.0 °F	93 %	SE	1.4 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:59 AM	74.5 °F	72.0 °F	93 %	SE	1.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:04 AM	74.4 °F	72.4 °F	93 %	SE	0.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:09 AM	74.3 °F	73.0 °F	94 %	SE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:14 AM	74.3 °F	73.0 °F	94 %	SE	1.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:19 AM	74.3 °F	72.5 °F	94 %	SE	0.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:24 AM	74.0 °F	72.0 °F	94 %	SE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:29 AM	73.9 °F	72.0 °F	94 %	SE	0.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:34 AM	73.8 °F	72.0 °F	94 %	SE	2.4 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:39 AM	73.9 °F	72.0 °F	94 %	SE	3.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:44 AM	73.9 °F	72.0 °F	94 %	ESE	4.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:49 AM	73.9 °F	72.0 °F	94 %	East	5.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		3:54 AM	73.9 °F	72.0 °F	94 %	East	5.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:59 AM	73.8 °F	72.0 °F	94 %	East	5.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:04 AM	73.7 °F	72.0 °F	94 %	East	4.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:09 AM	73.6 °F	72.0 °F	94 %	East	4.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:14 AM	73.5 °F	72.0 °F	94 %	East	3.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:19 AM	73.4 °F	72.0 °F	94 %	East	2.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		4:24 AM	73.3 °F	72.0 °F	94 %	East	2.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		4:29 AM	73.4 °F	72.0 °F	94 %	East	2.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:34 AM	73.5 °F	72.0 °F	94 %	East	2.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:39 AM	73.4 °F	72.0 °F	94 %	East	2.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:44 AM	73.3 °F	71.8 °F	94 %	East	2.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:49 AM	73.2 °F	71.2 °F	94 %	East	2.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:54 AM	73.0 °F	71.0 °F	94 %	East	3.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		4:59 AM	73.1 °F	71.0 °F	94 %	East	3.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:04 AM	73.1 °F	71.0 °F	94 %	East	2.9 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:09 AM	73.0 °F	71.0 °F	94 %	East	3.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:14 AM	73.1 °F	71.0 °F	94 %	East	2.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:19 AM	72.8 °F	71.0 °F	94 %	East	2.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:24 AM	72.6 °F	71.0 °F	94 %	East	2.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:29 AM	72.6 °F	71.0 °F	94 %	East	2.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:34 AM	72.6 °F	71.0 °F	94 %	East	2.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:39 AM	72.5 °F	71.0 °F	94 %	East	3.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:44 AM	72.6 °F	71.0 °F	94 %	East	2.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:49 AM	72.6 °F	71.0 °F	94 %	East	2.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:54 AM	72.8 °F	71.0 °F	94 %	East	1.9 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:59 AM	72.8 °F	71.0 °F	94 %	East	1.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:04 AM	72.6 °F	71.0 °F	94 %	East	1.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:09 AM	72.6 °F	71.0 °F	94 %	East	1.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:14 AM	72.5 °F	71.0 °F	94 %	East	0.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:19 AM	72.4 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:24 AM	72.4 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:29 AM	72.4 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:34 AM	72.5 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:39 AM	72.4 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:44 AM	72.5 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:49 AM	72.5 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:54 AM	72.6 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:59 AM	72.7 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		7:04 AM	72.8 °F	71.0 °F	94 %	East	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:23 PM											
		7:49 PM	84.0 °F	75.1 °F	75 %	South	**18.1 mph**	27.0 mph	30.05 in	0.00 in	0.00 in		
		7:54 PM	83.1 °F	74.3 °F	75 %	South	**16.2 mph**	27.6 mph	30.05 in	0.00 in	0.00 in		
		7:59 PM	83.1 °F	74.0 °F	75 %	South	**13.4 mph**	25.3 mph	30.05 in	0.00 in	0.00 in		
		8:04 PM	83.0 °F	74.0 °F	75 %	SSW	**9.5 mph**	20.9 mph	30.05 in	0.00 in	0.00 in		
		8:09 PM	83.0 °F	74.0 °F	75 %	SSW	8.3 mph	16.9 mph	30.04 in	0.00 in	0.00 in		
		8:14 PM	83.1 °F	74.0 °F	75 %	SSW	7.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:19 PM	83.0 °F	74.0 °F	75 %	SW	7.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:24 PM	83.1 °F	74.1 °F	75 %	SW	7.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:29 PM	83.3 °F	75.0 °F	75 %	SSW	5.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:34 PM	83.2 °F	74.5 °F	75 %	WSW	6.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:39 PM	83.0 °F	74.5 °F	76 %	West	**9.5 mph**	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:44 PM	82.8 °F	74.7 °F	76 %	West	**9.5 mph**	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:49 PM	82.3 °F	74.3 °F	77 %	WSW	**10.6 mph**	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:54 PM	81.1 °F	74.0 °F	78 %	WSW	**11.3 mph**	0.0 mph	30.05 in	0.00 in	0.00 in		
		8:59 PM	80.5 °F	74.0 °F	80 %	West	7.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:04 PM	80.3 °F	74.0 °F	81 %	WSW	4.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:09 PM	80.1 °F	74.0 °F	82 %	SSW	4.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		9:14 PM	79.7 °F	74.0 °F	83 %	South	6.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		9:19 PM	79.5 °F	74.0 °F	82 %	SSW	5.4 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:24 PM	79.2 °F	74.0 °F	83 %	SSW	7.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:29 PM	79.0 °F	74.0 °F	83 %	SSW	5.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:34 PM	79.0 °F	74.0 °F	84 %	SSW	3.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:39 PM	78.9 °F	74.0 °F	84 %	SSW	1.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:44 PM	78.7 °F	74.0 °F	84 %	SSW	2.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:49 PM	78.4 °F	74.0 °F	86 %	SSW	2.9 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		9:54 PM	78.0 °F	74.0 °F	87 %	South	5.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		9:59 PM	77.8 °F	74.0 °F	87 %	SSE	4.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:04 PM	78.0 °F	74.0 °F	87 %	SSE	3.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:09 PM	78.2 °F	74.0 °F	87 %	SE	2.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:14 PM	78.4 °F	74.0 °F	87 %	SE	1.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:19 PM	78.6 °F	74.5 °F	87 %	SE	0.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:24 PM	78.7 °F	75.0 °F	87 %	SE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:29 PM	78.6 °F	74.9 °F	87 %	SE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		10:34 PM	78.5 °F	74.0 °F	87 %	SSW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		10:39 PM	78.4 °F	74.5 °F	88 %	WSW	3.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		10:44 PM	78.3 °F	75.0 °F	88 %	WSW	5.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		10:49 PM	78.4 °F	75.0 °F	88 %	WSW	2.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		10:54 PM	78.4 °F	74.7 °F	88 %	SW	2.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		10:59 PM	78.3 °F	74.8 °F	88 %	WSW	3.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		11:04 PM	78.3 °F	74.9 °F	88 %	SW	3.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		11:09 PM	78.2 °F	74.0 °F	88 %	SW	2.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		11:14 PM	78.0 °F	74.0 °F	88 %	SW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		11:19 PM	78.1 °F	74.0 °F	88 %	West	0.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		11:24 PM	78.1 °F	74.0 °F	88 %	West	2.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		11:29 PM	78.1 °F	74.0 °F	88 %	WNW	2.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		11:34 PM	78.2 °F	74.3 °F	88 %	WNW	0.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		11:39 PM	78.3 °F	74.6 °F	88 %	WNW	0.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		11:44 PM	78.3 °F	74.0 °F	87 %	WNW	0.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		11:49 PM	78.4 °F	74.0 °F	87 %	WNW	0.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		11:54 PM	78.7 °F	75.0 °F	87 %	SSE	2.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		11:59 PM	78.6 °F	75.0 °F	87 %	SE	2.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:04 AM	78.4 °F	74.6 °F	88 %	South	2.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		12:09 AM	78.1 °F	74.0 °F	88 %	South	2.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:14 AM	78.0 °F	74.8 °F	89 %	South	2.4 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:19 AM	78.0 °F	75.0 °F	89 %	South	0.9 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:24 AM	77.8 °F	74.4 °F	89 %	SSW	3.4 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:29 AM	77.4 °F	74.1 °F	90 %	SW	3.9 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:34 AM	77.2 °F	74.2 °F	91 %	SW	4.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:39 AM	77.0 °F	74.0 °F	91 %	SW	3.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:44 AM	76.9 °F	74.0 °F	91 %	SW	1.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:49 AM	77.1 °F	74.0 °F	91 %	SW	1.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:54 AM	77.1 °F	74.0 °F	91 %	SW	0.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:59 AM	77.1 °F	74.0 °F	91 %	SW	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:04 AM	77.2 °F	74.5 °F	91 %	SW	0.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:09 AM	77.3 °F	74.0 °F	90 %	SW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:14 AM	77.3 °F	74.1 °F	90 %	SW	2.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:19 AM	77.2 °F	74.4 °F	90 %	SW	1.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
2	6/17/2025 - 6/18/2025	1:24 AM	77.3 °F	75.0 °F	91 %	SW	0.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in	3-6	No - sustained wind speeds greater than 9 mph for more than 30 minutes within first 5 hours of survey
		1:29 AM	77.3 °F	74.7 °F	91 %	SW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:34 AM	77.3 °F	74.2 °F	90 %	SW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:39 AM	77.3 °F	74.0 °F	90 %	SW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:44 AM	77.3 °F	74.0 °F	90 %	SW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:49 AM	77.4 °F	74.0 °F	90 %	SW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:54 AM	77.5 °F	74.0 °F	90 %	SW	1.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:59 AM	77.4 °F	74.0 °F	90 %	SW	0.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:04 AM	77.3 °F	74.0 °F	90 %	SW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:09 AM	77.1 °F	74.0 °F	90 %	SW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:14 AM	77.1 °F	74.0 °F	90 %	SW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:19 AM	77.2 °F	74.3 °F	91 %	SW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:24 AM	77.2 °F	74.0 °F	90 %	SW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:29 AM	77.1 °F	74.0 °F	90 %	NW	0.8 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:34 AM	77.2 °F	74.0 °F	90 %	NNW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:39 AM	77.3 °F	74.0 °F	90 %	NNW	0.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:44 AM	77.3 °F	74.0 °F	90 %	NNW	2.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:49 AM	77.2 °F	74.0 °F	89 %	NNW	2.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:54 AM	77.2 °F	74.0 °F	89 %	North	2.6 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:59 AM	77.1 °F	74.0 °F	90 %	NNE	2.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:04 AM	77.1 °F	74.0 °F	90 %	NNE	2.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:09 AM	76.9 °F	74.0 °F	90 %	NNE	1.9 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:14 AM	76.8 °F	74.0 °F	90 %	NNE	1.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:19 AM	76.7 °F	74.0 °F	90 %	NE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:24 AM	76.6 °F	74.0 °F	91 %	NNE	0.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:29 AM	76.5 °F	74.0 °F	91 %	NNE	2.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:34 AM	76.4 °F	74.0 °F	91 %	NNE	2.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:39 AM	76.3 °F	74.0 °F	91 %	NNE	2.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:44 AM	76.4 °F	74.0 °F	91 %	North	2.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:49 AM	76.3 °F	74.0 °F	91 %	NNE	2.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:54 AM	76.4 °F	74.0 °F	91 %	NNE	2.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:59 AM	76.4 °F	74.0 °F	91 %	North	2.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:04 AM	76.3 °F	74.0 °F	91 %	NNE	2.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:09 AM	76.2 °F	74.0 °F	91 %	NE	2.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:14 AM	76.2 °F	73.7 °F	91 %	NE	2.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:19 AM	76.1 °F	73.0 °F	91 %	NE	2.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:24 AM	76.1 °F	73.0 °F	91 %	ENE	1.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:29 AM	76.0 °F	73.0 °F	91 %	ENE	1.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:34 AM	75.8 °F	73.0 °F	91 %	ENE	1.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:39 AM	75.7 °F	73.0 °F	92 %	ENE	1.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:44 AM	75.6 °F	73.0 °F	92 %	ENE	2.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:49 AM	75.4 °F	73.0 °F	92 %	ENE	3.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:54 AM	75.3 °F	73.0 °F	92 %	ENE	2.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		4:59 AM	75.2 °F	73.0 °F	92 %	ENE	2.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:04 AM	75.1 °F	73.0 °F	92 %	ENE	2.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:09 AM	75.0 °F	73.0 °F	92 %	NE	2.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:14 AM	74.9 °F	73.0 °F	92 %	ENE	2.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:19 AM	74.8 °F	72.0 °F	92 %	ENE	2.9 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:24 AM	74.7 °F	72.5 °F	93 %	ENE	2.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:29 AM	74.6 °F	73.0 °F	93 %	NE	2.4 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:34 AM	74.6 °F	72.8 °F	93 %	ENE	2.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:39 AM	74.5 °F	72.1 °F	93 %	NE	3.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:44 AM	74.5 °F	72.0 °F	93 %	NE	2.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:49 AM	74.3 °F	72.0 °F	93 %	NE	1.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:54 AM	74.3 °F	72.0 °F	93 %	NNE	0.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:59 AM	74.2 °F	72.0 °F	93 %	North	0.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:04 AM	74.2 °F	72.0 °F	93 %	North	1.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:09 AM	74.2 °F	72.0 °F	93 %	-	0.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:14 AM	74.0 °F	72.0 °F	93 %	-	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:19 AM	74.0 °F	72.0 °F	93 %	-	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:24 AM	73.9 °F	72.0 °F	93 %	-	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:29 AM	73.8 °F	72.0 °F	94 %	-	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:34 AM	73.7 °F	72.0 °F	94 %	-	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:39 AM	73.7 °F	72.0 °F	94 %	-	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:44 AM	73.7 °F	72.0 °F	94 %	-	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:49 AM	73.7 °F	72.0 °F	94 %	-	0.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:54 AM	73.8 °F	72.0 °F	94 %	-	1.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:59 AM	74.0 °F	72.0 °F	94 %	NE	1.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		7:04 AM	74.1 °F	72.0 °F	94 %	ENE	1.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:23 PM											
		7:49 PM	78.5 °F	74.3 °F	87 %	ENE	5.8 mph	0.0 mph	30.10 in	0.02 in	0.02 in		
		7:54 PM	77.8 °F	74.0 °F	89 %	NNE	3.8 mph	0.0 mph	30.10 in	0.05 in	0.05 in		
		7:59 PM	77.2 °F	74.0 °F	89 %	East	**10.7 mph**	0.0 mph	30.11 in	0.10 in	0.10 in		
		8:04 PM	76.6 °F	73.8 °F	90 %	ESE	**12.9 mph**	0.0 mph	30.11 in	0.14 in	0.14 in		
		8:09 PM	76.1 °F	73.0 °F	90 %	ESE	**10.9 mph**	10.1 mph	30.11 in	0.17 in	0.17 in		
		8:14 PM	75.7 °F	73.0 °F	91 %	SE	**12.5 mph**	18.4 mph	30.11 in	0.18 in	0.18 in		
		8:19 PM	75.2 °F	72.7 °F	91 %	SE	**10.2 mph**	11.0 mph	30.11 in	0.19 in	0.19 in		
		8:24 PM	75.0 °F	72.1 °F	91 %	SE	**10.6 mph**	0.0 mph	30.11 in	0.19 in	0.19 in		
		8:29 PM	74.9 °F	72.0 °F	91 %	SE	**11.6 mph**	0.0 mph	30.11 in	0.19 in	0.19 in		
		8:34 PM	74.8 °F	72.0 °F	91 %	SE	**13.7 mph**	0.0 mph	30.11 in	0.19 in	0.19 in		
		8:39 PM	74.8 °F	72.0 °F	91 %	SE	**10.7 mph**	14.7 mph	30.11 in	0.19 in	0.19 in		
		8:44 PM	74.8 °F	72.0 °F	91 %	SSE	7.7 mph	3.7 mph	30.11 in	0.19 in	0.19 in		
		8:49 PM	74.6 °F	72.0 °F	91 %	SSE	5.7 mph	0.0 mph	30.11 in	0.19 in	0.20 in		
		8:54 PM	74.7 °F	72.0 °F	91 %	SSE	4.4 mph	0.0 mph	30.11 in	0.18 in	0.20 in		
		8:59 PM	74.8 °F	72.0 °F	91 %	South	4.0 mph	0.0 mph	30.12 in	0.13 in	0.20 in		
		9:04 PM	74.8 °F	72.0 °F	91 %	South	4.5 mph	0.0 mph	30.12 in	0.09 in	0.20 in		
		9:09 PM	74.8 °F	72.1 °F	91 %	South	4.5 mph	0.0 mph	30.11 in	0.05 in	0.20 in		
		9:14 PM	74.7 °F	72.0 °F	91 %	South	5.4 mph	0.0 mph	30.11 in	0.03 in	0.20 in		
		9:19 PM	74.7 °F	72.0 °F	91 %	SSE	6.3 mph	0.0 mph	30.11 in	0.02 in	0.20 in		
		9:24 PM	74.7 °F	72.0 °F	92 %	SSW	5.8 mph	0.0 mph	30.11 in	0.01 in	0.20 in		
		9:29 PM	74.6 °F	72.0 °F	92 %	SW	4.6 mph	0.0 mph	30.11 in	0.01 in	0.20 in		
		9:34 PM	74.5 °F	72.0 °F	92 %	SW	5.7 mph	0.0 mph	30.12 in	0.01 in	0.20 in		
		9:39 PM	74.4 °F	72.0 °F	91 %	SW	5.9 mph	0.0 mph	30.12 in	0.01 in	0.20 in		
		9:44 PM	74.4 °F	72.0 °F	91 %	SW	5.7 mph	0.0 mph	30.12 in	0.01 in	0.20 in		
		9:49 PM	74.4 °F	72.0 °F	91 %	SW	4.0 mph	0.0 mph	30.11 in	0.00 in	0.20 in		
		9:54 PM	74.6 °F	72.0 °F	91 %	South	3.6 mph	0.0 mph	30.12 in	0.00 in	0.20 in		
		9:59 PM	74.5 °F	72.0 °F	91 %	South	1.1 mph	0.0 mph	30.12 in	0.00 in	0.20 in		
		10:04 PM	74.4 °F	72.0 °F	91 %	SW	3.4 mph	0.0 mph	30.12 in	0.00 in	0.20 in		
		10:09 PM	74.5 °F	72.0 °F	91 %	SW	3.5 mph	0.0 mph	30.12 in	0.00 in	0.20 in		
		10:14 PM	74.7 °F	72.0 °F	91 %	SE	3.6 mph	0.0 mph	30.12 in	0.00 in	0.20 in		
		10:19 PM	74.8 °F	72.0 °F	91 %	ESE	4.1 mph	0.0 mph	30.12 in	0.00 in	0.20 in		
		10:24 PM	74.5 °F	72.0 °F	91 %	ESE	3.7 mph	0.0 mph	30.12 in	0.00 in	0.20 in		
		10:29 PM	74.4 °F	72.0 °F	91 %	ESE	3.2 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:34 PM	74.5 °F	72.0 °F	91 %	ESE	4.3 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:39 PM	74.3 °F	72.0 °F	92 %	ESE	4.6 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:44 PM	74.2 °F	72.0 °F	92 %	ESE	4.3 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:49 PM	74.3 °F	72.0 °F	92 %	ESE	5.1 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		10:54 PM	74.3 °F	72.0 °F	92 %	ESE	3.7 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		10:59 PM	74.4 °F	72.0 °F	92 %	SSE	2.8 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		11:04 PM	74.3 °F	72.0 °F	92 %	SSE	0.3 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		11:09 PM	74.5 °F	72.0 °F	92 %	SE	2.3 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		11:14 PM	74.6 °F	72.0 °F	91 %	SE	1.2 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		11:19 PM	74.6 °F	72.0 °F	91 %	South	1.9 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		11:24 PM	74.7 °F	72.0 °F	91 %	South	0.0 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		11:29 PM	74.8 °F	72.2 °F	92 %	South	0.3 mph	0.0 mph	30.15 in	0.00 in	0.20 in		
		11:34 PM	74.7 °F	72.0 °F	92 %	SSE	1.5 mph	0.0 mph	30.16 in	0.00 in	0.20 in		
		11:39 PM	74.7 °F	72.0 °F	92 %	SE	1.8 mph	0.0 mph	30.16 in	0.00 in	0.20 in		
		11:44 PM	74.9 °F	72.7 °F	92 %	SE	1.2 mph	0.0 mph	30.16 in	0.00 in	0.20 in		
		11:49 PM	74.9 °F	72.6 °F	92 %	SE	0.3 mph	0.0 mph	30.15 in	0.00 in	0.20 in		
		11:54 PM	74.7 °F	72.0 °F	92 %	SE	0.0 mph	0.0 mph	30.15 in	0.00 in	0.20 in		
		11:59 PM	74.7 °F	72.0 °F	92 %	SE	0.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:04 AM	74.7 °F	72.0 °F	92 %	SE	0.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:09 AM	74.8 °F	72.7 °F	93 %	SE	0.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:14 AM	74.9 °F	72.9 °F	93 %	SE	0.7 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:19 AM	74.8 °F	72.3 °F	92 %	SE	0.4 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:24 AM	74.9 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:29 AM	74.9 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:34 AM	74.8 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:39 AM	74.8 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:44 AM	74.9 °F	73.0 °F	93 %	SE	0.7 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:49 AM	75.0 °F	73.0 °F	93 %	SE	0.6 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:54 AM	75.0 °F	73.0 °F	93 %	SE	0.8 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:59 AM	75.1 °F	73.0 °F	93 %	SE	0.4 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:04 AM	75.1 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:09 AM	75.1 °F	73.0 °F	93 %	SE	0.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:14 AM	75.2 °F	73.0 °F	93 %	WSW	0.3 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:19 AM	75.1 °F	73.0 °F	93 %	West	3.5 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
3	6/18/2025 - 6/19/2025	1:24 AM	75.1 °F	73.0 °F	93 %	WNW	2.9 mph	0.0 mph	30.14 in	0.00 in	0.00 in	3-6	No - sustained wind speeds greater than 9 mph for more than 30 minutes within first 5 hours of survey
		1:29 AM	75.1 °F	73.0 °F	93 %	West	2.5 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:34 AM	75.3 °F	73.0 °F	93 %	WNW	2.3 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:39 AM	75.3 °F	73.0 °F	93 %	WNW	0.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		1:44 AM	75.2 °F	73.0 °F	93 %	WNW	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		1:49 AM	75.3 °F	73.0 °F	93 %	WNW	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		1:54 AM	75.3 °F	73.0 °F	93 %	ENE	0.1 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		1:59 AM	75.4 °F	73.0 °F	93 %	ENE	1.5 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:04 AM	75.5 °F	73.1 °F	93 %	ENE	1.5 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:09 AM	75.5 °F	73.0 °F	93 %	ENE	0.1 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:14 AM	75.4 °F	73.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:19 AM	75.3 °F	73.0 °F	93 %	NNE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:24 AM	75.2 °F	73.0 °F	93 %	-	2.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:29 AM	75.1 °F	73.0 °F	93 %	NNE	3.8 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:34 AM	75.1 °F	73.0 °F	94 %	NNE	2.1 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:39 AM	75.0 °F	73.0 °F	94 %	NNE	1.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:44 AM	75.0 °F	73.0 °F	94 %	-	1.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:49 AM	75.0 °F	73.0 °F	94 %	NNW	2.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:54 AM	75.0 °F	73.0 °F	94 %	-	2.3 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:59 AM	74.9 °F	73.0 °F	94 %	North	1.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		3:04 AM	74.9 °F	73.0 °F	94 %	NNE	1.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:09 AM	75.0 °F	73.0 °F	94 %	ENE	1.4 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:14 AM	75.0 °F	73.0 °F	94 %	ENE	0.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:19 AM	74.9 °F	73.0 °F	94 %	NNE	1.4 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		3:24 AM	75.1 °F	73.0 °F	94 %	NW	1.8 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		3:29 AM	75.0 °F	73.0 °F	94 %	NW	1.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		3:34 AM	74.9 °F	73.0 °F	94 %	NW	0.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:39 AM	75.0 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:44 AM	75.1 °F	73.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:49 AM	75.1 °F	73.0 °F	94 %	ENE	1.5 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:54 AM	75.0 °F	73.0 °F	94 %	ENE	1.4 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:59 AM	75.0 °F	73.0 °F	94 %	NE	2.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:04 AM	74.9 °F	73.0 °F	94 %	NE	3.6 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:09 AM	74.9 °F	73.0 °F	94 %	NNE	2.1 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:14 AM	74.8 °F	73.0 °F	94 %	NNE	2.1 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:19 AM	74.7 °F	73.0 °F	94 %	NNE	1.4 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:24 AM	74.7 °F	73.0 °F	94 %	NNE	1.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:29 AM	74.7 °F	73.0 °F	94 %	-	1.6 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:34 AM	74.7 °F	73.0 °F	94 %	NNE	1.9 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:39 AM	74.7 °F	73.0 °F	94 %	NNE	1.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:44 AM	74.7 °F	73.0 °F	94 %	NNE	2.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:49 AM	74.7 °F	73.0 °F	94 %	North	2.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:54 AM	74.7 °F	73.0 °F	94 %	North	1.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		4:59 AM	74.7 °F	73.0 °F	94 %	North	0.5 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:04 AM	74.7 °F	73.0 °F	94 %	North	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:09 AM	74.6 °F	73.0 °F	94 %	North	0.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:14 AM	74.6 °F	73.0 °F	94 %	East	1.6 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:19 AM	74.7 °F	73.0 °F	94 %	ESE	1.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:24 AM	74.7 °F	73.0 °F	94 %	ESE	1.4 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:29 AM	74.6 °F	73.0 °F	94 %	ESE	1.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:34 AM	74.6 °F	73.0 °F	94 %	ESE	0.7 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:39 AM	74.6 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:44 AM	74.5 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:49 AM	74.4 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:54 AM	74.4 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		5:59 AM	74.4 °F	73.0 °F	94 %	ESE	0.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:04 AM	74.4 °F	73.0 °F	94 %	ESE	1.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:09 AM	74.4 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:14 AM	74.4 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:19 AM	74.3 °F	73.0 °F	94 %	ESE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:24 AM	74.2 °F	72.4 °F	94 %	ESE	0.5 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:29 AM	74.1 °F	72.0 °F	94 %	ESE	2.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:34 AM	74.2 °F	72.0 °F	94 %	East	2.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:39 AM	74.2 °F	72.2 °F	94 %	ENE	2.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:44 AM	74.1 °F	72.0 °F	94 %	ENE	2.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:49 AM	74.2 °F	72.0 °F	94 %	ENE	1.7 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:54 AM	74.2 °F	72.2 °F	94 %	ENE	0.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:59 AM	74.3 °F	73.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:04 AM	74.5 °F	73.0 °F	95 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:23 PM											
		7:49 PM	74.8 °F	71.0 °F	87 %	East	8.4 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:54 PM	74.7 °F	71.0 °F	87 %	East	**9.4 mph**	0.0 mph	30.11 in	0.00 in	0.00 in		
		7:59 PM	74.7 °F	71.0 °F	87 %	ESE	5.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		8:04 PM	74.8 °F	71.0 °F	87 %	SE	5.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		8:09 PM	74.8 °F	71.0 °F	87 %	SE	7.8 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		8:14 PM	74.8 °F	71.0 °F	87 %	SE	8.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		8:19 PM	74.9 °F	71.0 °F	87 %	SE	8.8 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		8:24 PM	74.8 °F	71.0 °F	87 %	SE	**9.8 mph**	0.0 mph	30.10 in	0.00 in	0.00 in		
		8:29 PM	74.8 °F	71.0 °F	87 %	SE	8.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		8:34 PM	74.8 °F	71.0 °F	88 %	SE	7.5 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		8:39 PM	74.6 °F	71.0 °F	89 %	SSE	8.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		8:44 PM	74.6 °F	71.6 °F	90 %	South	7.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		8:49 PM	74.5 °F	72.0 °F	90 %	South	5.7 mph	0.0 mph	30.11 in	**0.01 in**	0.01 in		
		8:54 PM	74.6 °F	72.0 °F	91 %	South	5.3 mph	0.0 mph	30.10 in	**0.01 in**	0.01 in		
		8:59 PM	74.6 °F	72.0 °F	91 %	SSE	3.7 mph	0.0 mph	30.09 in	**0.01 in**	0.01 in		
		9:04 PM	74.5 °F	72.0 °F	91 %	South	4.2 mph	0.0 mph	30.08 in	**0.01 in**	0.01 in		
		9:09 PM	74.4 °F	72.0 °F	92 %	South	2.0 mph	0.0 mph	30.08 in	**0.01 in**	0.01 in		
		9:14 PM	74.4 °F	72.0 °F	92 %	WSW	3.6 mph	0.0 mph	30.08 in	**0.02 in**	0.02 in		
		9:19 PM	74.4 °F	72.0 °F	92 %	WSW	4.0 mph	0.0 mph	30.08 in	**0.02 in**	0.02 in		
		9:24 PM	74.4 °F	72.0 °F	93 %	West	2.3 mph	0.0 mph	30.08 in	**0.02 in**	0.02 in		
		9:29 PM	74.4 °F	72.0 °F	93 %	NW	1.9 mph	0.0 mph	30.08 in	**0.02 in**	0.02 in		
		9:34 PM	74.3 °F	72.0 °F	93 %	NNE	2.6 mph	0.0 mph	30.08 in	**0.02 in**	0.02 in		
		9:39 PM	74.4 °F	72.0 °F	93 %	NE	3.9 mph	0.0 mph	30.08 in	**0.02 in**	0.02 in		
		9:44 PM	74.4 °F	72.0 °F	93 %	West	**11.0 mph**	6.4 mph	30.09 in	**0.02 in**	0.02 in		
		9:49 PM	74.3 °F	72.0 °F	93 %	WNW	5.4 mph	11.3 mph	30.09 in	**0.02 in**	0.02 in		
		9:54 PM	74.4 °F	72.0 °F	93 %	NNE	1.8 mph	0.0 mph	30.09 in	**0.01 in**	0.02 in		
		9:59 PM	74.4 °F	72.0 °F	93 %	NNE	0.5 mph	0.0 mph	30.10 in	**0.01 in**	0.02 in		
		10:04 PM	74.5 °F	72.4 °F	93 %	South	5.5 mph	0.0 mph	30.11 in	**0.01 in**	0.02 in		
		10:09 PM	74.5 °F	72.7 °F	94 %	South	6.8 mph	0.0 mph	30.12 in	**0.01 in**	0.02 in		
		10:14 PM	74.7 °F	73.0 °F	94 %	SSE	6.3 mph	0.0 mph	30.12 in	0.00 in	0.02 in		
		10:19 PM	74.6 °F	72.9 °F	94 %	SSE	8.0 mph	0.0 mph	30.12 in	0.00 in	0.02 in		
		10:24 PM	74.4 °F	72.9 °F	94 %	SE	**9.6 mph**	0.0 mph	30.12 in	0.00 in	0.02 in		
		10:29 PM	74.2 °F	72.2 °F	94 %	South	7.6 mph	0.0 mph	30.12 in	0.00 in	0.02 in		
		10:34 PM	74.3 °F	72.7 °F	94 %	SSW	3.2 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		10:39 PM	74.3 °F	72.7 °F	94 %	South	2.7 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		10:44 PM	74.2 °F	72.0 °F	93 %	ESE	5.3 mph	0.0 mph	30.14 in	0.00 in	0.02 in		
		10:49 PM	74.3 °F	72.0 °F	93 %	SE	3.8 mph	0.0 mph	30.14 in	0.00 in	0.02 in		
		10:54 PM	74.3 °F	72.0 °F	93 %	ESE	3.0 mph	0.0 mph	30.14 in	0.00 in	0.02 in		
		10:59 PM	74.4 °F	72.0 °F	93 %	ENE	1.6 mph	0.0 mph	30.14 in	0.00 in	0.02 in		
		11:04 PM	74.4 °F	72.0 °F	93 %	NNE	1.8 mph	0.0 mph	30.14 in	0.00 in	0.02 in		
		11:09 PM	74.4 °F	72.2 °F	93 %	WNW	2.8 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		11:14 PM	74.3 °F	72.8 °F	94 %	NW	1.1 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		11:19 PM	74.3 °F	73.0 °F	94 %	-	1.7 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		11:24 PM	74.4 °F	73.0 °F	94 %	East	1.7 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		11:29 PM	74.5 °F	73.0 °F	94 %	ESE	1.1 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		11:34 PM	74.4 °F	73.0 °F	94 %	SSW	2.4 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		11:39 PM	74.4 °F	73.0 °F	94 %	SW	2.1 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		11:44 PM	74.4 °F	73.0 °F	94 %	SW	0.2 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		11:49 PM	74.3 °F	72.7 °F	94 %	SW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.02 in		
		11:54 PM	74.4 °F	73.0 °F	94 %	SW	0.0 mph	0.0 mph	30.13 in	0.00 in	0.02 in		
		11:59 PM	74.4 °F	73.0 °F	94 %	SW	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:04 AM	74.5 °F	73.0 °F	94 %	SW	0.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:09 AM	74.6 °F	73.0 °F	94 %	SW	1.9 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:14 AM	74.7 °F	73.0 °F	94 %	SW	1.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:19 AM	74.8 °F	73.0 °F	94 %	SW	1.8 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:24 AM	74.7 °F	73.0 °F	94 %	SW	2.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:29 AM	74.7 °F	73.0 °F	94 %	SW	2.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:34 AM	74.7 °F	73.0 °F	94 %	SW	1.4 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:39 AM	74.8 °F	73.0 °F	94 %	SW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:44 AM	74.9 °F	73.0 °F	94 %	SW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:49 AM	74.9 °F	73.0 °F	94 %	SW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:54 AM	74.9 °F	73.0 °F	94 %	East	1.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:59 AM	74.9 °F	73.0 °F	94 %	East	1.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:04 AM	74.9 °F	73.0 °F	94 %	NNW	2.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:09 AM	74.8 °F	73.0 °F	94 %	NNW	0.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:14 AM	74.7 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:19 AM	74.8 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
4	6/19/2025 - 6/20/2025	1:24 AM	74.8 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in	3-6	No - precipitation, including rain and/or fog, that exceeds 30 minutes or continues intermittently during the first 5 hours of the survey period
		1:29 AM	74.7 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:34 AM	74.6 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:39 AM	74.6 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:44 AM	74.6 °F	73.0 °F	94 %	NW	1.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:49 AM	74.6 °F	73.0 °F	94 %	NW	1.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:54 AM	74.6 °F	73.0 °F	94 %	NW	0.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:59 AM	74.6 °F	73.0 °F	94 %	NW	0.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:04 AM	74.7 °F	73.0 °F	94 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:09 AM	74.6 °F	73.0 °F	94 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:14 AM	74.5 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:19 AM	74.4 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:24 AM	74.4 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:29 AM	74.5 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:34 AM	74.4 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:39 AM	74.5 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:44 AM	74.4 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:49 AM	74.3 °F	72.7 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:54 AM	74.2 °F	72.0 °F	94 %	SW	1.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:59 AM	73.8 °F	72.0 °F	94 %	SW	2.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:04 AM	74.0 °F	72.0 °F	94 %	SW	0.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:09 AM	73.9 °F	72.0 °F	94 %	SW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:14 AM	73.8 °F	72.0 °F	94 %	SW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:19 AM	73.7 °F	72.0 °F	94 %	West	1.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:24 AM	73.5 °F	72.0 °F	94 %	East	4.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:29 AM	73.6 °F	72.0 °F	95 %	ESE	3.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:34 AM	73.7 °F	72.0 °F	95 %	SE	5.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:39 AM	73.9 °F	72.2 °F	95 %	SE	4.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:44 AM	74.0 °F	72.6 °F	95 %	SSE	4.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:49 AM	74.0 °F	73.0 °F	95 %	SSE	4.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:54 AM	74.0 °F	73.0 °F	95 %	SSE	5.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:59 AM	74.1 °F	73.0 °F	95 %	SSE	2.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:04 AM	74.1 °F	73.0 °F	95 %	SSE	3.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:09 AM	74.0 °F	73.0 °F	95 %	SSE	2.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:14 AM	74.0 °F	72.6 °F	95 %	SE	2.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:19 AM	73.9 °F	72.0 °F	95 %	SE	2.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:24 AM	73.9 °F	72.1 °F	95 %	SE	0.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:29 AM	73.9 °F	72.0 °F	95 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:34 AM	73.8 °F	72.0 °F	95 %	SE	1.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:39 AM	73.6 °F	72.0 °F	95 %	SE	3.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:44 AM	73.6 °F	72.0 °F	95 %	SE	3.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:49 AM	73.7 °F	72.0 °F	95 %	SSE	2.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:54 AM	73.7 °F	72.0 °F	95 %	SSE	2.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:59 AM	73.7 °F	72.3 °F	95 %	SSE	3.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:04 AM	73.6 °F	72.0 °F	95 %	SSE	2.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:09 AM	73.5 °F	72.0 °F	95 %	SSE	0.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:14 AM	73.6 °F	72.0 °F	95 %	SSE	0.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:19 AM	73.6 °F	72.0 °F	96 %	SSE	1.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:24 AM	73.5 °F	72.0 °F	95 %	SSE	0.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:29 AM	73.3 °F	72.0 °F	95 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:34 AM	73.3 °F	72.0 °F	96 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:39 AM	73.4 °F	72.0 °F	96 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:44 AM	73.6 °F	72.0 °F	96 %	SSE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:49 AM	73.7 °F	73.0 °F	96 %	SSE	0.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:54 AM	73.7 °F	72.9 °F	96 %	SSE	2.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:59 AM	73.7 °F	73.0 °F	96 %	SSE	1.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:04 AM	73.7 °F	72.9 °F	96 %	SSE	1.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:09 AM	73.6 °F	72.3 °F	96 %	SSE	1.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:14 AM	73.6 °F	72.1 °F	96 %	SSE	1.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:19 AM	73.6 °F	72.1 °F	96 %	SSE	0.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:24 AM	73.7 °F	72.9 °F	96 %	SSE	0.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:29 AM	73.7 °F	73.0 °F	96 %	SSE	0.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:34 AM	73.7 °F	73.0 °F	96 %	East	2.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:39 AM	73.6 °F	72.1 °F	96 %	NNE	2.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:44 AM	73.6 °F	72.0 °F	96 %	NNE	1.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:49 AM	73.5 °F	72.0 °F	96 %	NNE	1.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:54 AM	73.3 °F	72.0 °F	96 %	NNE	2.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:59 AM	73.2 °F	72.0 °F	96 %	NNE	2.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		7:04 AM	73.2 °F	72.0 °F	96 %	NNE	2.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
	Sunrise	6:32 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:24 PM											
		7:49 PM	76.3 °F	73.0 °F	89 %	North	3.7 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		7:54 PM	76.2 °F	73.0 °F	89 %	North	3.0 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		7:59 PM	76.2 °F	72.7 °F	88 %	North	2.9 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:04 PM	76.3 °F	73.0 °F	88 %	SE	**10.4 mph**	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:09 PM	76.0 °F	72.7 °F	89 %	SE	2.6 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:14 PM	76.0 °F	72.8 °F	89 %	SSE	2.5 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:19 PM	75.8 °F	72.3 °F	89 %	WNW	2.9 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:24 PM	75.9 °F	72.4 °F	88 %	NNW	2.4 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:29 PM	75.9 °F	72.0 °F	88 %	NNW	0.2 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:34 PM	75.9 °F	72.0 °F	88 %	NNW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:39 PM	75.9 °F	72.0 °F	88 %	West	0.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:44 PM	76.0 °F	72.0 °F	88 %	West	0.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:49 PM	75.9 °F	72.0 °F	88 %	NNW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:54 PM	75.9 °F	72.0 °F	88 %	ENE	1.9 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:59 PM	76.0 °F	72.0 °F	88 %	ENE	5.0 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:04 PM	75.9 °F	72.0 °F	88 %	NE	5.3 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:09 PM	75.9 °F	72.0 °F	87 %	ENE	5.6 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:14 PM	75.9 °F	72.0 °F	87 %	NE	5.9 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:19 PM	75.9 °F	72.0 °F	87 %	ENE	5.0 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:24 PM	76.0 °F	72.0 °F	87 %	ENE	4.7 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:29 PM	75.9 °F	71.9 °F	86 %	ENE	5.6 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:34 PM	75.7 °F	72.0 °F	87 %	East	6.6 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:39 PM	75.5 °F	71.3 °F	87 %	East	8.6 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:44 PM	75.4 °F	71.0 °F	87 %	ENE	7.0 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:49 PM	75.6 °F	71.8 °F	87 %	ENE	7.3 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:54 PM	75.7 °F	72.0 °F	87 %	ENE	6.6 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:59 PM	75.7 °F	71.6 °F	87 %	East	6.8 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:04 PM	75.5 °F	71.3 °F	87 %	East	7.2 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:09 PM	75.1 °F	71.0 °F	87 %	ENE	4.9 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:14 PM	75.1 °F	71.0 °F	87 %	ENE	5.2 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:19 PM	75.3 °F	71.0 °F	87 %	ENE	3.9 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:24 PM	75.3 °F	71.0 °F	87 %	ENE	2.5 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:29 PM	75.3 °F	71.0 °F	87 %	ENE	0.8 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:34 PM	75.0 °F	71.0 °F	88 %	NW	0.7 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		10:39 PM	75.0 °F	71.0 °F	88 %	NW	3.7 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		10:44 PM	75.1 °F	71.0 °F	88 %	WNW	3.1 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		10:49 PM	75.1 °F	71.1 °F	88 %	WNW	1.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		10:54 PM	75.1 °F	71.0 °F	88 %	WNW	0.1 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		10:59 PM	75.0 °F	71.2 °F	88 %	NW	3.2 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:04 PM	74.9 °F	72.0 °F	89 %	WNW	4.7 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:09 PM	74.9 °F	72.0 °F	89 %	WNW	4.1 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:14 PM	75.0 °F	72.0 °F	89 %	NW	1.7 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:19 PM	75.0 °F	72.0 °F	89 %	NW	0.3 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:24 PM	75.0 °F	72.0 °F	89 %	NW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:29 PM	74.9 °F	72.0 °F	89 %	NW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:34 PM	75.0 °F	72.0 °F	89 %	-	0.4 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:39 PM	75.0 °F	72.0 °F	89 %	ENE	2.7 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:44 PM	75.0 °F	72.0 °F	89 %	ENE	3.4 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:49 PM	75.0 °F	72.0 °F	89 %	ENE	3.6 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:54 PM	74.9 °F	71.9 °F	89 %	East	3.7 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:59 PM	74.7 °F	71.0 °F	89 %	East	4.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:04 AM	74.5 °F	73.0 °F	94 %	SW	0.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:09 AM	74.6 °F	73.0 °F	94 %	SW	1.9 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:14 AM	74.7 °F	73.0 °F	94 %	SW	1.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:19 AM	74.8 °F	73.0 °F	94 %	SW	1.8 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:24 AM	74.7 °F	73.0 °F	94 %	SW	2.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:29 AM	74.7 °F	73.0 °F	94 %	SW	2.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:34 AM	74.7 °F	73.0 °F	94 %	SW	1.4 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:39 AM	74.8 °F	73.0 °F	94 %	SW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:44 AM	74.9 °F	73.0 °F	94 %	SW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:49 AM	74.9 °F	73.0 °F	94 %	SW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:54 AM	74.9 °F	73.0 °F	94 %	East	1.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:59 AM	74.9 °F	73.0 °F	94 %	East	1.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:04 AM	74.9 °F	73.0 °F	94 %	NNW	2.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:09 AM	74.8 °F	73.0 °F	94 %	NNW	0.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:14 AM	74.7 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:19 AM	74.8 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
5	6/20/2025 - 6/21/2025	1:24 AM	74.8 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in	3-6	Yes
		1:29 AM	74.7 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:34 AM	74.6 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:39 AM	74.6 °F	73.0 °F	94 %	NNW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:44 AM	74.6 °F	73.0 °F	94 %	NW	1.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:49 AM	74.6 °F	73.0 °F	94 %	NW	1.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:54 AM	74.6 °F	73.0 °F	94 %	NW	0.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:59 AM	74.6 °F	73.0 °F	94 %	NW	0.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:04 AM	74.7 °F	73.0 °F	94 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:09 AM	74.6 °F	73.0 °F	94 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:14 AM	74.5 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:19 AM	74.4 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:24 AM	74.4 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:29 AM	74.5 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:34 AM	74.4 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:39 AM	74.5 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:44 AM	74.4 °F	73.0 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:49 AM	74.3 °F	72.7 °F	94 %	West	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:54 AM	74.2 °F	72.0 °F	94 %	SW	1.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:59 AM	73.8 °F	72.0 °F	94 %	SW	2.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:04 AM	74.0 °F	72.0 °F	94 %	SW	0.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:09 AM	73.9 °F	72.0 °F	94 %	SW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:14 AM	73.8 °F	72.0 °F	94 %	SW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:19 AM	73.7 °F	72.0 °F	94 %	West	1.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:24 AM	73.5 °F	72.0 °F	94 %	East	4.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:29 AM	73.6 °F	72.0 °F	95 %	ESE	3.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:34 AM	73.7 °F	72.0 °F	95 %	SE	5.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:39 AM	73.9 °F	72.2 °F	95 %	SE	4.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:44 AM	74.0 °F	72.6 °F	95 %	SSE	4.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:49 AM	74.0 °F	73.0 °F	95 %	SSE	4.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:54 AM	74.0 °F	73.0 °F	95 %	SSE	5.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:59 AM	74.1 °F	73.0 °F	95 %	SSE	2.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:04 AM	74.1 °F	73.0 °F	95 %	SSE	3.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:09 AM	74.0 °F	73.0 °F	95 %	SSE	2.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:14 AM	74.0 °F	72.6 °F	95 %	SE	2.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		4:19 AM	73.9 °F	72.0 °F	95 %	SE	2.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:24 AM	73.9 °F	72.1 °F	95 %	SE	0.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:29 AM	73.9 °F	72.0 °F	95 %	SE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:34 AM	73.8 °F	72.0 °F	95 %	SE	1.9 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:39 AM	73.6 °F	72.0 °F	95 %	SE	3.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:44 AM	73.6 °F	72.0 °F	95 %	SE	3.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:49 AM	73.7 °F	72.0 °F	95 %	SSE	2.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:54 AM	73.7 °F	72.0 °F	95 %	SSE	2.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:59 AM	73.7 °F	72.3 °F	95 %	SSE	3.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:04 AM	73.6 °F	72.0 °F	95 %	SSE	2.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:09 AM	73.5 °F	72.0 °F	95 %	SSE	0.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:14 AM	73.6 °F	72.0 °F	95 %	SSE	0.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		5:19 AM	73.6 °F	72.0 °F	96 %	SSE	1.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:24 AM	73.5 °F	72.0 °F	95 %	SSE	0.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:29 AM	73.3 °F	72.0 °F	95 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:34 AM	73.3 °F	72.0 °F	96 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:39 AM	73.4 °F	72.0 °F	96 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		5:44 AM	73.6 °F	72.0 °F	96 %	SSE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:49 AM	73.7 °F	73.0 °F	96 %	SSE	0.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:54 AM	73.7 °F	72.9 °F	96 %	SSE	2.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:59 AM	73.7 °F	73.0 °F	96 %	SSE	1.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:04 AM	73.7 °F	72.9 °F	96 %	SSE	1.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:09 AM	73.6 °F	72.3 °F	96 %	SSE	1.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:14 AM	73.6 °F	72.1 °F	96 %	SSE	1.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:19 AM	73.6 °F	72.1 °F	96 %	SSE	0.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:24 AM	73.7 °F	72.9 °F	96 %	SSE	0.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:29 AM	73.7 °F	73.0 °F	96 %	SSE	0.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:34 AM	73.7 °F	73.0 °F	96 %	East	2.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:39 AM	73.6 °F	72.1 °F	96 %	NNE	2.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:44 AM	73.6 °F	72.0 °F	96 %	NNE	1.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:49 AM	73.5 °F	72.0 °F	96 %	NNE	1.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:54 AM	73.3 °F	72.0 °F	96 %	NNE	2.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:59 AM	73.2 °F	72.0 °F	96 %	NNE	2.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		7:04 AM	73.2 °F	72.0 °F	96 %	NNE	2.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
	Sunrise	6:33 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:24 PM											
		7:04 PM	75.8 °F	73.0 °F	90 %	WSW	4.3 mph	0.0 mph	30.05 in	0.01 in	0.01 in		
		7:09 PM	75.7 °F	73.0 °F	90 %	-	3.2 mph	0.0 mph	30.05 in	0.01 in	0.01 in		
		7:14 PM	75.7 °F	73.0 °F	90 %	NE	3.3 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		7:19 PM	75.9 °F	73.0 °F	90 %	NNW	4.3 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		7:24 PM	76.1 °F	73.0 °F	90 %	NW	5.6 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		7:29 PM	76.3 °F	73.0 °F	90 %	NW	4.9 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		7:34 PM	76.3 °F	73.0 °F	90 %	NW	5.1 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		7:39 PM	76.3 °F	73.0 °F	89 %	NW	7.6 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		7:44 PM	76.2 °F	73.0 °F	89 %	NW	6.3 mph	0.0 mph	30.04 in	0.00 in	0.01 in		
		7:49 PM	76.3 °F	73.0 °F	89 %	North	3.7 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		7:54 PM	76.2 °F	73.0 °F	89 %	North	3.0 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		7:59 PM	76.2 °F	72.7 °F	88 %	North	2.9 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:04 PM	76.3 °F	73.0 °F	88 %	SE	**10.4 mph**	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:09 PM	76.0 °F	72.7 °F	89 %	SE	2.6 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:14 PM	76.0 °F	72.8 °F	89 %	SSE	2.5 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:19 PM	75.8 °F	72.3 °F	89 %	WNW	2.9 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:24 PM	75.9 °F	72.4 °F	88 %	NNW	2.4 mph	0.0 mph	30.05 in	0.00 in	0.01 in		
		8:29 PM	75.9 °F	72.0 °F	88 %	NNW	0.2 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:34 PM	75.9 °F	72.0 °F	88 %	NNW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:39 PM	75.9 °F	72.0 °F	88 %	West	0.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:44 PM	76.0 °F	72.0 °F	88 %	West	0.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:49 PM	75.9 °F	72.0 °F	88 %	NNW	0.0 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:54 PM	75.9 °F	72.0 °F	88 %	ENE	1.9 mph	0.0 mph	30.06 in	0.00 in	0.01 in		
		8:59 PM	76.0 °F	72.0 °F	88 %	ENE	5.0 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:04 PM	75.9 °F	72.0 °F	88 %	NE	5.3 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:09 PM	75.9 °F	72.0 °F	87 %	ENE	5.6 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:14 PM	75.9 °F	72.0 °F	87 %	NE	5.9 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:19 PM	75.9 °F	72.0 °F	87 %	ENE	5.0 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:24 PM	76.0 °F	72.0 °F	87 %	ENE	4.7 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:29 PM	75.9 °F	71.9 °F	86 %	ENE	5.6 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:34 PM	75.7 °F	72.0 °F	87 %	East	6.6 mph	0.0 mph	30.07 in	0.00 in	0.01 in		
		9:39 PM	75.5 °F	71.3 °F	87 %	East	8.6 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:44 PM	75.4 °F	71.0 °F	87 %	ENE	7.0 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:49 PM	75.6 °F	71.8 °F	87 %	ENE	7.3 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:54 PM	75.7 °F	72.0 °F	87 %	ENE	6.6 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		9:59 PM	75.7 °F	71.6 °F	87 %	East	6.8 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:04 PM	75.5 °F	71.3 °F	87 %	East	7.2 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
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		10:14 PM	75.1 °F	71.0 °F	87 %	ENE	5.2 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:19 PM	75.3 °F	71.0 °F	87 %	ENE	3.9 mph	0.0 mph	30.08 in	0.00 in	0.01 in		
		10:24 PM	75.3 °F	71.0 °F	87 %	ENE	2.5 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:29 PM	75.3 °F	71.0 °F	87 %	ENE	0.8 mph	0.0 mph	30.09 in	0.00 in	0.01 in		
		10:34 PM	75.0 °F	71.0 °F	88 %	NW	0.7 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		10:39 PM	75.0 °F	71.0 °F	88 %	NW	3.7 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
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		11:04 PM	74.9 °F	72.0 °F	89 %	WNW	4.7 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:09 PM	74.9 °F	72.0 °F	89 %	WNW	4.1 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:14 PM	75.0 °F	72.0 °F	89 %	NW	1.7 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:19 PM	75.0 °F	72.0 °F	89 %	NW	0.3 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:24 PM	75.0 °F	72.0 °F	89 %	NW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:29 PM	74.9 °F	72.0 °F	89 %	NW	0.0 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:34 PM	75.0 °F	72.0 °F	89 %	-	0.4 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:39 PM	75.0 °F	72.0 °F	89 %	ENE	2.7 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:44 PM	75.0 °F	72.0 °F	89 %	ENE	3.4 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:49 PM	75.0 °F	72.0 °F	89 %	ENE	3.6 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:54 PM	74.9 °F	71.9 °F	89 %	East	3.7 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:59 PM	74.7 °F	71.0 °F	89 %	East	4.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:04 AM	76.0 °F	72.0 °F	86 %	East	2.5 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:09 AM	75.9 °F	72.0 °F	87 %	East	3.3 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:14 AM	76.1 °F	72.0 °F	87 %	East	3.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:19 AM	76.2 °F	72.0 °F	87 %	East	3.4 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:24 AM	76.2 °F	72.0 °F	87 %	ESE	3.8 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:29 AM	76.3 °F	72.0 °F	87 %	ESE	3.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:34 AM	76.3 °F	72.0 °F	87 %	ESE	3.3 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:39 AM	76.2 °F	72.0 °F	87 %	ESE	3.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:44 AM	76.2 °F	72.1 °F	87 %	ESE	3.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:49 AM	76.3 °F	72.9 °F	88 %	ESE	3.3 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:54 AM	76.3 °F	72.8 °F	88 %	ESE	3.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:59 AM	76.3 °F	73.0 °F	88 %	ESE	3.5 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
6	6/21/2025 - 6/22/2025	1:04 AM	76.2 °F	72.4 °F	88 %	ESE	3.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in	3-6	Yes
		1:09 AM	76.0 °F	72.0 °F	88 %	ESE	3.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:14 AM	75.9 °F	72.0 °F	88 %	East	3.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:19 AM	75.8 °F	72.0 °F	88 %	East	3.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:24 AM	75.6 °F	72.0 °F	89 %	East	3.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:29 AM	75.5 °F	72.0 °F	89 %	East	3.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:34 AM	75.3 °F	72.0 °F	89 %	East	3.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:39 AM	75.4 °F	72.0 °F	89 %	East	3.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:44 AM	75.3 °F	72.0 °F	89 %	East	2.7 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:49 AM	75.3 °F	72.0 °F	89 %	East	3.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:54 AM	75.2 °F	72.0 °F	89 %	East	3.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:59 AM	75.2 °F	72.0 °F	90 %	ESE	2.7 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		2:04 AM	75.3 °F	72.0 °F	90 %	ESE	3.4 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		2:09 AM	75.3 °F	72.0 °F	90 %	ESE	3.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:14 AM	75.2 °F	72.0 °F	90 %	East	2.6 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:19 AM	75.2 °F	72.0 °F	90 %	East	2.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:24 AM	75.1 °F	72.0 °F	90 %	East	2.8 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:29 AM	75.1 °F	72.0 °F	90 %	East	2.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:34 AM	74.9 °F	72.0 °F	90 %	East	2.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:39 AM	74.9 °F	72.0 °F	90 %	East	1.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:44 AM	74.9 °F	72.0 °F	91 %	East	1.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:49 AM	74.9 °F	72.0 °F	91 %	East	2.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:54 AM	75.0 °F	72.0 °F	91 %	East	2.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:59 AM	74.8 °F	72.0 °F	91 %	East	2.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:04 AM	74.7 °F	72.0 °F	91 %	East	1.9 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:09 AM	74.5 °F	72.0 °F	91 %	East	1.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:14 AM	74.4 °F	72.0 °F	91 %	East	2.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:19 AM	74.5 °F	72.0 °F	91 %	East	1.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:24 AM	74.5 °F	72.0 °F	91 %	East	1.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:29 AM	74.6 °F	72.0 °F	91 %	East	1.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:34 AM	74.6 °F	72.0 °F	92 %	East	1.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:39 AM	74.6 °F	72.0 °F	92 %	East	1.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:44 AM	74.3 °F	72.0 °F	92 %	East	1.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:49 AM	74.3 °F	72.0 °F	92 %	East	0.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:54 AM	74.3 °F	72.0 °F	92 %	East	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		3:59 AM	74.3 °F	72.0 °F	93 %	East	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:04 AM	74.2 °F	72.0 °F	93 %	East	2.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:09 AM	74.2 °F	72.0 °F	93 %	NE	1.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:14 AM	74.2 °F	72.0 °F	93 %	NE	1.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:19 AM	74.1 °F	72.0 °F	93 %	NNE	2.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:24 AM	74.0 °F	72.0 °F	93 %	NNE	2.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:29 AM	73.9 °F	72.0 °F	93 %	North	2.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:34 AM	73.9 °F	72.0 °F	93 %	NNE	1.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:39 AM	73.9 °F	72.0 °F	93 %	North	2.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:44 AM	73.9 °F	72.0 °F	93 %	North	2.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:49 AM	74.0 °F	72.0 °F	93 %	NNE	2.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:54 AM	74.0 °F	72.0 °F	94 %	NNE	2.6 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:59 AM	74.0 °F	72.0 °F	94 %	NNE	2.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:04 AM	74.0 °F	72.0 °F	94 %	NNE	2.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:09 AM	74.0 °F	72.0 °F	94 %	North	2.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:14 AM	74.0 °F	72.0 °F	94 %	NNE	1.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:19 AM	74.0 °F	72.0 °F	94 %	NNE	2.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:24 AM	73.9 °F	72.0 °F	94 %	NNE	2.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:29 AM	74.0 °F	72.0 °F	94 %	NNE	2.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:34 AM	73.9 °F	72.0 °F	94 %	NE	1.8 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:39 AM	74.0 °F	72.0 °F	94 %	NE	2.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:44 AM	74.0 °F	72.0 °F	94 %	NE	2.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:49 AM	73.8 °F	72.0 °F	94 %	NE	2.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:54 AM	74.0 °F	72.0 °F	94 %	NE	1.9 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:59 AM	74.0 °F	72.0 °F	94 %	NE	1.7 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:04 AM	74.0 °F	72.0 °F	94 %	NE	2.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:09 AM	74.1 °F	72.0 °F	94 %	NE	2.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:14 AM	74.0 °F	72.0 °F	94 %	NE	2.8 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:19 AM	74.0 °F	72.0 °F	94 %	NE	2.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:24 AM	74.0 °F	72.0 °F	94 %	NE	2.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:29 AM	74.0 °F	72.0 °F	94 %	NE	3.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:34 AM	74.0 °F	72.0 °F	94 %	NE	3.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:39 AM	74.0 °F	72.0 °F	94 %	NE	3.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:44 AM	74.1 °F	72.0 °F	94 %	NE	3.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:49 AM	74.2 °F	72.0 °F	94 %	NE	3.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:54 AM	74.2 °F	72.0 °F	94 %	ENE	2.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:59 AM	74.2 °F	72.0 °F	94 %	ENE	3.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		7:04 AM	74.3 °F	72.5 °F	94 %	ENE	3.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
	Sunrise	6:33 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset						8:24 PM						
		7:04 PM	82.7 °F	76.0 °F	79 %	ESE	6.4 mph	0.0 mph	30.11 in	0.00 in	0.13 in		
		7:09 PM	82.7 °F	76.0 °F	79 %	ESE	6.2 mph	0.0 mph	30.11 in	0.00 in	0.13 in		
		7:14 PM	82.7 °F	76.0 °F	80 %	East	4.5 mph	0.0 mph	30.12 in	0.00 in	0.13 in		
		7:19 PM	82.8 °F	76.0 °F	80 %	ESE	4.1 mph	0.0 mph	30.12 in	0.00 in	0.13 in		
		7:24 PM	82.9 °F	76.0 °F	80 %	ESE	3.6 mph	0.0 mph	30.12 in	0.00 in	0.13 in		
		7:29 PM	82.8 °F	76.0 °F	80 %	East	3.8 mph	0.0 mph	30.12 in	0.00 in	0.13 in		
		7:34 PM	82.9 °F	76.9 °F	81 %	East	2.8 mph	0.0 mph	30.12 in	0.00 in	0.13 in		
		7:39 PM	82.8 °F	76.3 °F	81 %	East	3.3 mph	0.0 mph	30.12 in	0.00 in	0.13 in		
		7:44 PM	82.8 °F	76.0 °F	81 %	ESE	3.3 mph	0.0 mph	30.11 in	0.00 in	0.13 in		
		7:49 PM	82.8 °F	76.0 °F	80 %	East	3.4 mph	0.0 mph	30.11 in	0.00 in	0.13 in		
		7:54 PM	82.6 °F	76.0 °F	81 %	East	5.1 mph	0.0 mph	30.11 in	0.00 in	0.13 in		
		7:59 PM	82.3 °F	76.0 °F	80 %	East	6.5 mph	0.0 mph	30.10 in	0.00 in	0.13 in		
		8:04 PM	82.2 °F	75.9 °F	80 %	East	7.9 mph	0.0 mph	30.11 in	0.00 in	0.13 in		
		8:09 PM	82.1 °F	75.0 °F	79 %	ESE	7.5 mph	0.0 mph	30.11 in	0.00 in	0.13 in		
		8:14 PM	81.7 °F	74.7 °F	80 %	SE	**11.1 mph**	5.9 mph	30.13 in	0.00 in	0.13 in		
		8:19 PM	78.7 °F	73.0 °F	82 %	South	**16.1 mph**	23.0 mph	30.13 in	0.00 in	0.13 in		
		8:24 PM	77.7 °F	72.5 °F	84 %	South	**13.7 mph**	23.0 mph	30.14 in	0.00 in	0.13 in		
		8:29 PM	77.3 °F	72.1 °F	84 %	SE	**12.7 mph**	20.3 mph	30.14 in	0.00 in	0.13 in		
		8:34 PM	76.7 °F	71.8 °F	84 %	ESE	**16.7 mph**	25.2 mph	30.15 in	**0.01 in**	0.14 in		
		8:39 PM	74.4 °F	69.7 °F	85 %	ESE	**16.4 mph**	27.6 mph	30.16 in	**0.01 in**	0.14 in		
		8:44 PM	73.3 °F	69.0 °F	86 %	ESE	**13.0 mph**	27.6 mph	30.16 in	**0.04 in**	0.17 in		
		8:49 PM	72.4 °F	68.6 °F	87 %	ESE	**12.9 mph**	20.9 mph	30.16 in	**0.05 in**	0.18 in		
		8:54 PM	71.9 °F	68.2 °F	88 %	ESE	**13.1 mph**	20.0 mph	30.16 in	**0.05 in**	0.18 in		
		8:59 PM	71.5 °F	68.0 °F	89 %	ESE	**12.9 mph**	20.7 mph	30.16 in	**0.05 in**	0.18 in		
		9:04 PM	71.3 °F	68.0 °F	89 %	ESE	**12.0 mph**	20.4 mph	30.16 in	**0.06 in**	0.19 in		
		9:09 PM	70.9 °F	68.0 °F	89 %	ESE	**12.4 mph**	19.2 mph	30.16 in	**0.07 in**	0.20 in		
		9:14 PM	71.0 °F	68.0 °F	89 %	ESE	**10.7 mph**	18.4 mph	30.16 in	**0.07 in**	0.20 in		
		9:19 PM	71.2 °F	68.0 °F	89 %	East	**11.0 mph**	11.0 mph	30.16 in	**0.07 in**	0.20 in		
		9:24 PM	71.3 °F	68.0 °F	89 %	East	**9.5 mph**	0.0 mph	30.16 in	**0.07 in**	0.20 in		
		9:29 PM	71.3 °F	68.0 °F	89 %	ESE	**12.2 mph**	10.7 mph	30.15 in	**0.07 in**	0.20 in		
		9:34 PM	71.4 °F	68.0 °F	89 %	East	**12.6 mph**	15.6 mph	30.15 in	**0.07 in**	0.20 in		
		9:39 PM	71.7 °F	68.4 °F	89 %	East	**9.8 mph**	14.7 mph	30.15 in	**0.06 in**	0.20 in		
		9:44 PM	72.0 °F	68.2 °F	88 %	East	**11.5 mph**	11.0 mph	30.14 in	**0.06 in**	0.20 in		
		9:49 PM	72.1 °F	68.4 °F	88 %	East	**10.0 mph**	0.0 mph	30.14 in	**0.03 in**	0.20 in		
		9:54 PM	72.2 °F	68.9 °F	88 %	East	8.3 mph	0.0 mph	30.14 in	**0.02 in**	0.20 in		
		9:59 PM	72.5 °F	69.0 °F	88 %	East	4.8 mph	0.0 mph	30.13 in	**0.02 in**	0.20 in		
		10:04 PM	72.7 °F	69.0 °F	88 %	East	4.5 mph	0.0 mph	30.13 in	**0.02 in**	0.20 in		
		10:09 PM	72.5 °F	69.0 °F	88 %	East	5.5 mph	0.0 mph	30.12 in	**0.01 in**	0.20 in		
		10:14 PM	72.4 °F	69.0 °F	89 %	East	5.3 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:19 PM	72.4 °F	69.0 °F	89 %	East	5.2 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:24 PM	72.4 °F	69.0 °F	89 %	East	4.5 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:29 PM	72.4 °F	69.3 °F	90 %	ESE	3.3 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:34 PM	72.6 °F	70.0 °F	90 %	SE	3.0 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:39 PM	72.7 °F	70.0 °F	90 %	SE	2.9 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:44 PM	72.9 °F	70.0 °F	90 %	ESE	2.5 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:49 PM	72.9 °F	70.0 °F	90 %	ESE	2.5 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:54 PM	73.1 °F	70.3 °F	90 %	ESE	3.3 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		10:59 PM	73.2 °F	70.5 °F	91 %	SE	2.9 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		11:04 PM	73.1 °F	70.3 °F	91 %	SE	2.7 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		11:09 PM	73.1 °F	70.1 °F	91 %	East	3.6 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		11:14 PM	73.2 °F	71.0 °F	91 %	ENE	3.4 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		11:19 PM	73.2 °F	71.0 °F	91 %	ENE	3.0 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		11:24 PM	73.2 °F	70.5 °F	91 %	ENE	3.7 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		11:29 PM	73.1 °F	70.1 °F	91 %	East	3.7 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		11:34 PM	73.0 °F	70.8 °F	92 %	East	3.0 mph	0.0 mph	30.13 in	0.00 in	0.20 in		
		11:39 PM	73.0 °F	71.0 °F	92 %	East	3.6 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		11:44 PM	73.2 °F	71.0 °F	92 %	East	3.9 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		11:49 PM	73.2 °F	71.0 °F	92 %	East	5.1 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		11:54 PM	73.3 °F	71.0 °F	92 %	East	5.3 mph	0.0 mph	30.14 in	0.00 in	0.20 in		
		11:59 PM	73.4 °F	71.0 °F	92 %	East	4.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:04 AM	73.4 °F	71.0 °F	92 %	ENE	3.7 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:09 AM	73.5 °F	71.0 °F	91 %	ENE	3.6 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:14 AM	73.6 °F	71.0 °F	91 %	ENE	2.1 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:19 AM	73.5 °F	71.0 °F	91 %	ENE	2.1 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:24 AM	73.4 °F	71.0 °F	91 %	NE	2.7 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:29 AM	73.4 °F	71.0 °F	91 %	NE	2.6 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:34 AM	73.3 °F	71.0 °F	91 %	NE	2.8 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:39 AM	73.2 °F	70.9 °F	91 %	NE	3.3 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:44 AM	73.1 °F	70.1 °F	91 %	NNE	3.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:49 AM	73.0 °F	71.0 °F	92 %	NNE	2.6 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:54 AM	72.9 °F	71.0 °F	92 %	North	2.8 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:59 AM	72.9 °F	71.0 °F	92 %	North	2.6 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
7	6/22/2025 - 6/23/2025	1:04 AM	72.9 °F	71.0 °F	92 %	-	3.1 mph	0.0 mph	30.15 in	0.00 in	0.00 in	3-6	No - sustained wind speeds greater than 9 mph for more than 30 minutes within first 5 hours of survey and precipitation, including rain and/or fog, that exceeds 30 minutes or continues intermittently during the first 5 hours of the survey period
		1:09 AM	72.9 °F	71.0 °F	92 %	North	3.2 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		1:14 AM	72.9 °F	71.0 °F	92 %	NNW	3.4 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		1:19 AM	72.8 °F	70.5 °F	92 %	-	3.1 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		1:24 AM	72.8 °F	70.0 °F	92 %	-	3.9 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:29 AM	72.7 °F	70.0 °F	92 %	NNW	3.6 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:34 AM	72.7 °F	70.0 °F	92 %	NNW	3.4 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:39 AM	72.8 °F	70.4 °F	92 %	-	3.7 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:44 AM	73.0 °F	71.0 °F	92 %	NNW	2.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		1:49 AM	73.0 °F	71.0 °F	92 %	-	2.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		1:54 AM	73.0 °F	71.0 °F	92 %	North	3.4 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		1:59 AM	72.9 °F	71.0 °F	92 %	North	3.4 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:04 AM	72.8 °F	70.1 °F	92 %	-	3.4 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:09 AM	72.7 °F	70.2 °F	92 %	North	2.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:14 AM	72.5 °F	70.0 °F	92 %	North	3.8 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:19 AM	72.4 °F	70.0 °F	92 %	-	3.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:24 AM	72.2 °F	70.0 °F	93 %	North	3.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:29 AM	72.1 °F	70.0 °F	93 %	-	2.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:34 AM	72.1 °F	70.0 °F	93 %	-	3.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:39 AM	72.0 °F	70.0 °F	93 %	NNE	2.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:44 AM	72.0 °F	70.0 °F	93 %	-	2.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:49 AM	71.9 °F	70.0 °F	93 %	NNE	2.5 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		2:54 AM	71.9 °F	70.0 °F	93 %	North	1.9 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		2:59 AM	72.0 °F	70.0 °F	93 %	North	1.7 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:04 AM	72.0 °F	70.0 °F	93 %	NNW	0.4 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:09 AM	72.0 °F	70.0 °F	93 %	North	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:14 AM	72.0 °F	70.0 °F	93 %	North	1.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:19 AM	72.0 °F	70.0 °F	93 %	-	1.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:24 AM	71.9 °F	70.0 °F	93 %	-	0.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:29 AM	71.9 °F	70.0 °F	93 %	North	2.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:34 AM	72.0 °F	70.0 °F	93 %	NNE	2.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:39 AM	72.1 °F	70.0 °F	93 %	NNE	2.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:44 AM	72.2 °F	70.0 °F	94 %	NNE	1.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:49 AM	72.2 °F	70.4 °F	94 %	NNE	2.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:54 AM	72.3 °F	70.6 °F	94 %	NNE	2.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:59 AM	72.2 °F	70.4 °F	94 %	NNE	2.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:04 AM	72.2 °F	70.3 °F	94 %	NNE	3.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:09 AM	72.2 °F	70.1 °F	94 %	NNE	2.8 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:14 AM	72.2 °F	70.1 °F	94 %	NNE	2.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:19 AM	72.2 °F	70.0 °F	94 %	NNE	2.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:24 AM	72.2 °F	70.0 °F	94 %	NNE	3.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:29 AM	72.2 °F	70.0 °F	94 %	NNE	2.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:34 AM	72.2 °F	70.0 °F	94 %	NNE	2.6 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:39 AM	72.2 °F	70.0 °F	94 %	NNE	2.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:44 AM	72.1 °F	70.0 °F	94 %	NE	2.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:49 AM	72.1 °F	70.0 °F	94 %	NNE	2.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:54 AM	72.1 °F	70.0 °F	94 %	NE	2.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:59 AM	72.1 °F	70.0 °F	94 %	NE	2.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:04 AM	72.1 °F	70.0 °F	94 %	NE	2.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:09 AM	72.2 °F	70.2 °F	94 %	NE	2.6 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:14 AM	72.3 °F	70.9 °F	94 %	NE	2.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:19 AM	72.3 °F	71.0 °F	94 %	NE	1.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:24 AM	72.3 °F	71.0 °F	94 %	NNE	2.6 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:29 AM	72.3 °F	71.0 °F	94 %	NNE	2.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:34 AM	72.4 °F	71.0 °F	94 %	NE	2.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:39 AM	72.5 °F	71.0 °F	94 %	NNE	3.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:44 AM	72.6 °F	71.0 °F	94 %	NE	2.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:49 AM	72.5 °F	71.0 °F	94 %	NNE	1.6 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:54 AM	72.6 °F	71.0 °F	94 %	NNE	2.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:59 AM	72.6 °F	71.0 °F	94 %	NNE	1.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:04 AM	72.6 °F	71.0 °F	94 %	NE	1.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:09 AM	72.6 °F	71.0 °F	94 %	NNE	1.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:14 AM	72.6 °F	71.0 °F	94 %	NE	2.2 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:19 AM	72.6 °F	71.0 °F	94 %	NE	2.6 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:24 AM	72.7 °F	71.0 °F	95 %	NE	3.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:29 AM	72.7 °F	71.0 °F	95 %	NE	3.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:34 AM	72.7 °F	71.0 °F	95 %	NNE	2.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:39 AM	72.7 °F	71.0 °F	95 %	NE	2.9 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:44 AM	72.8 °F	71.0 °F	95 %	NE	2.7 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:49 AM	72.8 °F	71.0 °F	95 %	NE	1.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:54 AM	72.9 °F	71.0 °F	95 %	NE	1.6 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		6:59 AM	73.0 °F	71.6 °F	95 %	NE	2.6 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		7:04 AM	73.1 °F	72.0 °F	95 %	ENE	2.5 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
	Sunrise						6:33 AM						

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:24 PM											
		7:04 PM	86.3 °F	75.0 °F	69 %	East	5.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:09 PM	86.2 °F	74.1 °F	68 %	East	6.4 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:14 PM	86.1 °F	75.0 °F	69 %	East	5.1 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:19 PM	86.1 °F	75.0 °F	69 %	ENE	3.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:24 PM	85.9 °F	75.0 °F	69 %	ENE	3.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:29 PM	85.7 °F	75.0 °F	70 %	ENE	6.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		7:34 PM	85.2 °F	75.7 °F	73 %	NE	5.6 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		7:39 PM	84.1 °F	75.3 °F	75 %	NE	5.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		7:44 PM	83.2 °F	75.0 °F	77 %	NNE	4.9 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:49 PM	82.5 °F	75.0 °F	78 %	NE	3.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:54 PM	82.3 °F	75.0 °F	78 %	NE	4.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		7:59 PM	82.1 °F	75.0 °F	79 %	NNE	2.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		8:04 PM	82.1 °F	75.0 °F	79 %	NE	2.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		8:09 PM	82.1 °F	75.0 °F	79 %	NE	2.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:14 PM	82.1 °F	75.0 °F	78 %	NE	0.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:19 PM	81.9 °F	74.6 °F	78 %	NE	2.5 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:24 PM	81.7 °F	74.1 °F	78 %	NE	3.4 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:29 PM	81.4 °F	74.1 °F	79 %	NNE	2.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:34 PM	81.1 °F	74.0 °F	79 %	NE	1.8 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:39 PM	80.9 °F	74.0 °F	80 %	NNE	0.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:44 PM	80.6 °F	74.0 °F	80 %	NNE	1.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:49 PM	80.4 °F	74.0 °F	80 %	NNE	0.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:54 PM	80.3 °F	74.0 °F	81 %	NNE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		8:59 PM	80.4 °F	74.0 °F	81 %	East	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:04 PM	79.8 °F	74.0 °F	82 %	East	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:09 PM	79.4 °F	74.0 °F	83 %	East	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:14 PM	79.2 °F	74.0 °F	83 %	East	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:19 PM	78.6 °F	73.7 °F	84 %	ENE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:24 PM	78.4 °F	74.0 °F	85 %	NNE	2.2 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:29 PM	78.6 °F	74.0 °F	85 %	NE	1.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:34 PM	78.8 °F	74.0 °F	84 %	NE	1.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:39 PM	78.8 °F	74.0 °F	84 %	NE	1.3 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:44 PM	78.7 °F	74.0 °F	84 %	NE	2.1 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:49 PM	78.7 °F	74.0 °F	84 %	NE	1.2 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:54 PM	78.7 °F	74.0 °F	84 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		9:59 PM	78.5 °F	74.0 °F	85 %	NE	0.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:04 PM	78.5 °F	74.0 °F	85 %	NE	0.2 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:09 PM	78.4 °F	74.0 °F	85 %	NE	1.8 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:14 PM	78.2 °F	74.0 °F	86 %	ENE	0.7 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:19 PM	78.0 °F	73.9 °F	86 %	ENE	0.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:24 PM	77.5 °F	73.0 °F	87 %	ENE	0.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:29 PM	77.6 °F	73.9 °F	87 %	ENE	1.1 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:34 PM	77.7 °F	73.6 °F	87 %	ENE	1.8 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:39 PM	77.8 °F	73.3 °F	86 %	ENE	2.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:44 PM	78.0 °F	74.0 °F	86 %	NE	3.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		10:49 PM	78.1 °F	73.6 °F	86 %	ENE	2.9 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		10:54 PM	78.2 °F	73.4 °F	85 %	ENE	2.8 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		10:59 PM	78.3 °F	74.0 °F	85 %	NE	3.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		11:04 PM	78.3 °F	74.0 °F	85 %	ENE	3.9 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		11:09 PM	78.3 °F	74.0 °F	85 %	ENE	3.9 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		11:14 PM	78.3 °F	73.8 °F	85 %	ENE	4.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		11:19 PM	78.2 °F	73.3 °F	85 %	ENE	3.7 mph	0.0 mph	30.16 in	0.00 in	0.00 in		
		11:24 PM	78.1 °F	74.0 °F	86 %	ENE	2.6 mph	0.0 mph	30.16 in	0.00 in	0.00 in		
		11:29 PM	77.8 °F	73.2 °F	86 %	NE	3.4 mph	0.0 mph	30.16 in	0.00 in	0.00 in		
		11:34 PM	77.6 °F	73.7 °F	87 %	NE	3.5 mph	0.0 mph	30.16 in	0.00 in	0.00 in		
		11:39 PM	77.6 °F	74.0 °F	87 %	ENE	3.6 mph	0.0 mph	30.16 in	0.00 in	0.00 in		
		11:44 PM	77.5 °F	73.4 °F	87 %	ENE	3.5 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		11:49 PM	77.5 °F	73.0 °F	87 %	ENE	3.9 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		11:54 PM	77.4 °F	74.0 °F	88 %	ENE	3.1 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		11:59 PM	77.3 °F	74.0 °F	88 %	ENE	3.9 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:04 AM	77.3 °F	74.0 °F	88 %	ENE	4.8 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:09 AM	77.1 °F	73.2 °F	88 %	East	4.2 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:14 AM	76.9 °F	73.6 °F	89 %	East	3.7 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:19 AM	76.9 °F	74.0 °F	89 %	ENE	3.3 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:24 AM	77.0 °F	74.0 °F	89 %	ENE	4.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:29 AM	77.0 °F	74.0 °F	89 %	NE	3.8 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:34 AM	76.9 °F	74.0 °F	89 %	ENE	4.9 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:39 AM	76.9 °F	73.8 °F	89 %	ENE	5.4 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:44 AM	76.8 °F	73.3 °F	89 %	ENE	6.6 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:49 AM	76.9 °F	73.6 °F	89 %	ENE	6.3 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:54 AM	76.9 °F	73.9 °F	89 %	ENE	5.7 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		12:59 AM	76.9 °F	74.0 °F	89 %	ENE	5.4 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
8	6/23/2025 - 6/24/2025	1:04 AM	76.9 °F	73.9 °F	89 %	ENE	5.8 mph	0.0 mph	30.15 in	0.00 in	0.00 in	3-6	Yes
		1:09 AM	76.8 °F	73.5 °F	89 %	ENE	4.8 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		1:14 AM	76.7 °F	73.0 °F	89 %	ENE	4.3 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		1:19 AM	76.7 °F	73.0 °F	89 %	ENE	4.4 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		1:24 AM	76.5 °F	73.0 °F	89 %	ENE	4.6 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		1:29 AM	76.4 °F	73.0 °F	90 %	ENE	4.6 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:34 AM	76.2 °F	73.0 °F	90 %	ENE	4.1 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:39 AM	76.1 °F	73.0 °F	90 %	ENE	4.2 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:44 AM	76.0 °F	73.0 °F	90 %	ENE	3.9 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:49 AM	76.0 °F	73.0 °F	90 %	ENE	3.8 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:54 AM	76.0 °F	73.0 °F	90 %	ENE	3.9 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		1:59 AM	75.9 °F	73.0 °F	90 %	ENE	4.4 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		2:04 AM	75.8 °F	73.0 °F	90 %	ENE	3.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:09 AM	75.6 °F	73.0 °F	91 %	NE	2.7 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		2:14 AM	75.4 °F	73.0 °F	91 %	NE	2.3 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		2:19 AM	75.3 °F	73.0 °F	91 %	ENE	2.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:24 AM	75.2 °F	72.9 °F	91 %	ENE	3.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:29 AM	75.1 °F	72.0 °F	91 %	ENE	2.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:34 AM	75.0 °F	72.0 °F	91 %	ENE	2.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:39 AM	74.9 °F	72.0 °F	91 %	ENE	2.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		2:44 AM	74.9 °F	73.0 °F	92 %	ENE	2.8 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:49 AM	74.8 °F	72.1 °F	91 %	ENE	2.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:54 AM	74.7 °F	72.0 °F	92 %	ENE	2.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:59 AM	74.6 °F	72.0 °F	92 %	ENE	2.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:04 AM	74.3 °F	71.8 °F	92 %	ENE	1.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:09 AM	73.9 °F	71.8 °F	92 %	ENE	1.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:14 AM	73.8 °F	71.2 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:19 AM	73.8 °F	71.3 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:24 AM	73.8 °F	71.1 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:29 AM	73.7 °F	71.8 °F	93 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:34 AM	73.7 °F	72.0 °F	93 %	NE	1.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:39 AM	73.7 °F	72.0 °F	93 %	NE	2.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:44 AM	73.7 °F	72.0 °F	93 %	NE	1.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:49 AM	73.6 °F	71.9 °F	93 %	NE	1.4 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:54 AM	73.4 °F	71.0 °F	93 %	NE	1.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		3:59 AM	73.4 °F	71.0 °F	93 %	NE	1.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:04 AM	73.4 °F	71.0 °F	93 %	NE	1.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:09 AM	73.3 °F	71.0 °F	93 %	NE	0.9 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:14 AM	73.3 °F	71.0 °F	93 %	NE	0.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:19 AM	73.1 °F	71.0 °F	93 %	NE	1.4 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:24 AM	72.9 °F	71.0 °F	93 %	NE	0.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:29 AM	72.8 °F	71.0 °F	93 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:34 AM	72.6 °F	71.0 °F	93 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:39 AM	72.7 °F	71.0 °F	93 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:44 AM	72.8 °F	71.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:49 AM	72.7 °F	71.0 °F	93 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:54 AM	72.6 °F	71.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		4:59 AM	72.6 °F	71.0 °F	94 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:04 AM	72.6 °F	71.0 °F	94 %	NE	0.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:09 AM	72.4 °F	71.0 °F	94 %	NE	0.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:14 AM	72.5 °F	71.0 °F	94 %	NE	0.1 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:19 AM	72.3 °F	71.0 °F	94 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:24 AM	72.2 °F	70.3 °F	94 %	NE	0.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:29 AM	72.3 °F	70.8 °F	94 %	NE	2.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:34 AM	72.3 °F	70.5 °F	94 %	NE	1.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:39 AM	72.2 °F	70.0 °F	94 %	NE	1.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:44 AM	72.1 °F	70.0 °F	94 %	NNE	2.4 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:49 AM	72.2 °F	70.0 °F	94 %	North	2.5 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:54 AM	72.1 °F	70.0 °F	94 %	North	2.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		5:59 AM	72.0 °F	70.0 °F	94 %	North	1.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		6:04 AM	71.9 °F	70.0 °F	94 %	North	2.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		6:09 AM	71.8 °F	70.0 °F	94 %	North	2.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		6:14 AM	71.7 °F	70.0 °F	94 %	North	0.9 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		6:19 AM	71.6 °F	70.0 °F	94 %	North	0.6 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		6:24 AM	71.6 °F	70.0 °F	94 %	North	1.4 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		6:29 AM	71.5 °F	70.0 °F	94 %	North	1.5 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		6:34 AM	71.4 °F	70.0 °F	94 %	North	1.7 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		6:39 AM	71.4 °F	70.0 °F	94 %	North	1.5 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		6:44 AM	71.5 °F	70.0 °F	94 %	North	0.5 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		6:49 AM	71.5 °F	70.0 °F	94 %	North	1.0 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		6:54 AM	71.6 °F	70.0 °F	94 %	North	2.5 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		6:59 AM	71.7 °F	70.0 °F	94 %	NNE	3.4 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
		7:04 AM	71.8 °F	70.0 °F	94 %	NNE	3.2 mph	0.0 mph	30.15 in	0.00 in	0.00 in		
	Sunrise	6:33 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:24 PM											
		7:54 PM	78.8 °F	76.0 °F	91 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		7:59 PM	78.8 °F	76.0 °F	91 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		8:04 PM	78.6 °F	76.0 °F	92 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		8:09 PM	78.5 °F	76.0 °F	92 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		8:14 PM	78.4 °F	76.0 °F	92 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		8:19 PM	78.3 °F	76.0 °F	92 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		8:24 PM	78.1 °F	76.0 °F	92 %	SE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.36 in		
		8:29 PM	78.1 °F	76.0 °F	93 %	SE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.36 in		
		8:34 PM	77.6 °F	75.1 °F	92 %	SE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.36 in		
		8:39 PM	77.2 °F	75.0 °F	92 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		8:44 PM	76.9 °F	75.0 °F	93 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		8:49 PM	76.8 °F	75.0 °F	93 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		8:54 PM	76.7 °F	75.0 °F	93 %	SE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		8:59 PM	76.6 °F	74.6 °F	93 %	SE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		9:04 PM	76.9 °F	75.0 °F	93 %	SE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		9:09 PM	76.9 °F	75.0 °F	93 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:14 PM	76.5 °F	74.4 °F	93 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:19 PM	76.5 °F	74.6 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:24 PM	76.5 °F	75.0 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:29 PM	76.2 °F	74.2 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:34 PM	76.3 °F	74.6 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:39 PM	76.5 °F	75.0 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:44 PM	76.1 °F	74.0 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:49 PM	75.8 °F	74.0 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:54 PM	75.7 °F	74.0 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		9:59 PM	75.5 °F	74.0 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		10:04 PM	75.4 °F	74.0 °F	94 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		10:09 PM	75.4 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		10:14 PM	75.7 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.36 in		
		10:19 PM	75.9 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		10:24 PM	75.9 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		10:29 PM	75.8 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		10:34 PM	75.7 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		10:39 PM	75.6 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		10:44 PM	75.4 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		10:49 PM	75.3 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		10:54 PM	75.3 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		10:59 PM	75.5 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:04 PM	75.4 °F	74.0 °F	94 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:09 PM	75.1 °F	73.0 °F	94 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:14 PM	75.0 °F	73.0 °F	94 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:19 PM	74.9 °F	73.0 °F	94 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:24 PM	74.9 °F	73.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		11:29 PM	75.0 °F	73.0 °F	94 %	NE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.36 in		
		11:34 PM	75.1 °F	73.0 °F	94 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:39 PM	74.9 °F	73.0 °F	94 %	NE	1.7 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:44 PM	74.9 °F	73.0 °F	94 %	NE	2.3 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:49 PM	74.9 °F	73.0 °F	94 %	NE	2.8 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:54 PM	75.0 °F	73.0 °F	93 %	NE	2.8 mph	0.0 mph	30.13 in	0.00 in	0.36 in		
		11:59 PM	75.2 °F	73.0 °F	93 %	NE	3.5 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:04 AM	75.3 °F	73.0 °F	92 %	NE	2.9 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:09 AM	75.3 °F	73.0 °F	92 %	NE	1.5 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:14 AM	75.0 °F	73.0 °F	92 %	NE	0.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:19 AM	74.8 °F	72.4 °F	92 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:24 AM	74.8 °F	72.0 °F	92 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:29 AM	74.6 °F	72.0 °F	92 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:34 AM	74.6 °F	72.0 °F	92 %	NE	0.3 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:39 AM	74.7 °F	72.0 °F	92 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:44 AM	74.6 °F	72.0 °F	92 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:49 AM	74.4 °F	72.0 °F	92 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:54 AM	74.4 °F	72.0 °F	92 %	NE	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:59 AM	74.4 °F	72.0 °F	92 %	NE	1.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		1:04 AM	74.7 °F	72.0 °F	92 %	NE	2.8 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		1:09 AM	74.8 °F	72.0 °F	92 %	NE	2.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:14 AM	74.8 °F	72.0 °F	92 %	NE	2.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:19 AM	74.8 °F	72.1 °F	92 %	NE	3.1 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:24 AM	74.8 °F	72.4 °F	92 %	NE	3.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
9	6/24/2025 - 6/25/2025	1:29 AM	74.8 °F	72.2 °F	92 %	NE	1.9 mph	0.0 mph	30.12 in	0.00 in	0.00 in	3-6	Yes
		1:34 AM	74.7 °F	72.0 °F	92 %	NE	1.9 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:39 AM	74.6 °F	72.0 °F	92 %	NE	2.8 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:44 AM	74.7 °F	72.0 °F	92 %	NE	2.6 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:49 AM	74.7 °F	72.0 °F	92 %	ENE	0.8 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:54 AM	74.7 °F	72.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:59 AM	74.6 °F	72.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:04 AM	74.6 °F	72.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:09 AM	74.6 °F	72.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:14 AM	74.5 °F	72.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:19 AM	74.4 °F	72.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:24 AM	74.3 °F	72.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:29 AM	74.1 °F	72.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:34 AM	73.9 °F	72.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:39 AM	73.8 °F	72.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:44 AM	73.8 °F	72.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:49 AM	73.7 °F	72.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		2:54 AM	73.6 °F	71.6 °F	93 %	ENE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		2:59 AM	73.5 °F	71.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:04 AM	73.4 °F	71.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:09 AM	73.3 °F	71.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:14 AM	73.2 °F	71.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:19 AM	73.2 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:24 AM	73.1 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:29 AM	73.0 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:34 AM	72.8 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:39 AM	72.7 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		3:44 AM	72.8 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:49 AM	72.9 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:54 AM	72.9 °F	71.0 °F	94 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:59 AM	72.9 °F	71.0 °F	94 %	NE	0.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:04 AM	72.9 °F	71.0 °F	94 %	NNE	1.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:09 AM	73.0 °F	71.3 °F	94 %	NNE	1.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:14 AM	73.1 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:19 AM	73.0 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:24 AM	73.0 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:29 AM	73.1 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:34 AM	73.0 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		4:39 AM	72.5 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:44 AM	72.3 °F	70.7 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:49 AM	72.7 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:54 AM	72.9 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:59 AM	72.9 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:04 AM	72.9 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:09 AM	72.7 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:14 AM	72.5 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:19 AM	72.5 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:24 AM	72.2 °F	70.3 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:29 AM	72.2 °F	70.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:34 AM	72.1 °F	70.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:39 AM	72.3 °F	70.6 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:44 AM	72.4 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:49 AM	72.3 °F	71.0 °F	94 %	NNE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:54 AM	72.3 °F	71.0 °F	94 %	NNE	0.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		5:59 AM	72.5 °F	71.0 °F	94 %	NE	2.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:04 AM	72.2 °F	70.4 °F	94 %	ENE	2.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:09 AM	72.0 °F	70.0 °F	94 %	ENE	1.8 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:14 AM	72.1 °F	70.0 °F	94 %	ENE	2.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:19 AM	72.1 °F	70.2 °F	94 %	East	2.8 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:24 AM	72.2 °F	70.5 °F	95 %	East	2.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:29 AM	72.2 °F	70.8 °F	95 %	East	2.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:34 AM	72.3 °F	71.0 °F	95 %	East	2.9 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:39 AM	72.5 °F	71.0 °F	95 %	East	2.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:44 AM	72.7 °F	71.0 °F	94 %	East	2.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:49 AM	72.7 °F	71.0 °F	94 %	East	2.2 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:54 AM	73.0 °F	71.6 °F	95 %	ENE	2.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:59 AM	73.4 °F	72.0 °F	95 %	ENE	2.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		7:04 AM	73.6 °F	72.0 °F	95 %	ENE	1.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
	Sunrise	6:34 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:25 PM											
		7:54 PM	84.3 °F	74.0 °F	72 %	East	7.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		7:59 PM	84.1 °F	74.0 °F	72 %	East	7.6 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		8:04 PM	83.9 °F	74.0 °F	72 %	East	6.8 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		8:09 PM	83.7 °F	74.0 °F	72 %	East	8.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		8:14 PM	83.6 °F	73.0 °F	71 %	East	**10.5 mph**	0.0 mph	30.03 in	0.00 in	0.00 in		
		8:19 PM	83.6 °F	73.0 °F	71 %	East	**10.6 mph**	0.0 mph	30.02 in	0.00 in	0.00 in		
		8:24 PM	83.4 °F	73.0 °F	71 %	ESE	**10.7 mph**	0.0 mph	30.03 in	0.00 in	0.00 in		
		8:29 PM	83.2 °F	73.0 °F	71 %	East	**12.4 mph**	17.3 mph	30.03 in	0.00 in	0.00 in		
		8:34 PM	83.0 °F	73.0 °F	72 %	ESE	9.3 mph	17.3 mph	30.03 in	0.00 in	0.00 in		
		8:39 PM	82.7 °F	73.0 °F	72 %	ESE	8.9 mph	3.5 mph	30.03 in	0.00 in	0.00 in		
		8:44 PM	82.4 °F	73.0 °F	73 %	ESE	8.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		8:49 PM	82.2 °F	73.0 °F	73 %	ESE	**9.8 mph**	0.0 mph	30.04 in	0.00 in	0.00 in		
		8:54 PM	82.0 °F	72.3 °F	72 %	ESE	**11.1 mph**	14.3 mph	30.04 in	0.00 in	0.00 in		
		8:59 PM	81.8 °F	72.0 °F	73 %	ESE	8.3 mph	16.1 mph	30.04 in	0.00 in	0.00 in		
		9:04 PM	81.5 °F	72.0 °F	73 %	ESE	8.4 mph	1.6 mph	30.04 in	0.00 in	0.00 in		
		9:09 PM	81.3 °F	71.6 °F	73 %	ESE	7.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		9:14 PM	81.2 °F	71.5 °F	73 %	ESE	7.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:19 PM	81.0 °F	71.8 °F	73 %	ESE	8.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		9:24 PM	80.7 °F	71.0 °F	73 %	ESE	7.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		9:29 PM	80.3 °F	71.0 °F	73 %	ESE	5.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		9:34 PM	80.1 °F	71.0 °F	73 %	ESE	6.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:39 PM	79.9 °F	70.8 °F	73 %	ESE	5.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:44 PM	79.7 °F	70.0 °F	73 %	ESE	4.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:49 PM	79.6 °F	70.0 °F	73 %	ESE	4.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:54 PM	79.3 °F	70.0 °F	73 %	ESE	4.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		9:59 PM	79.2 °F	70.0 °F	74 %	ESE	3.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:04 PM	79.0 °F	70.0 °F	74 %	ESE	5.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:09 PM	78.9 °F	70.0 °F	74 %	SE	3.2 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:14 PM	78.8 °F	70.0 °F	74 %	SE	1.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:19 PM	78.7 °F	70.0 °F	74 %	SE	1.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:24 PM	78.5 °F	70.0 °F	75 %	ESE	2.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:29 PM	78.3 °F	70.0 °F	75 %	ESE	1.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:34 PM	78.2 °F	70.0 °F	75 %	ESE	1.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:39 PM	78.0 °F	70.0 °F	76 %	ESE	2.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		10:44 PM	77.6 °F	70.0 °F	78 %	ESE	2.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:49 PM	77.0 °F	70.0 °F	79 %	ESE	2.6 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:54 PM	76.9 °F	70.0 °F	79 %	ESE	2.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		10:59 PM	76.9 °F	70.0 °F	79 %	ESE	0.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		11:04 PM	76.8 °F	70.0 °F	79 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:09 PM	76.8 °F	70.0 °F	79 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:14 PM	76.5 °F	70.0 °F	81 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:19 PM	76.3 °F	70.0 °F	81 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:24 PM	76.2 °F	70.0 °F	81 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:29 PM	75.4 °F	70.0 °F	82 %	ESE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		11:34 PM	74.7 °F	69.7 °F	84 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:39 PM	74.4 °F	69.6 °F	85 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:44 PM	74.4 °F	70.0 °F	85 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		11:49 PM	74.5 °F	69.2 °F	84 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		11:53 PM	74.3 °F	70.0 °F	85 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		11:59 PM	74.3 °F	69.0 °F	84 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:04 AM	74.2 °F	69.0 °F	84 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:09 AM	74.0 °F	69.0 °F	85 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:14 AM	74.2 °F	70.0 °F	85 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:19 AM	74.3 °F	70.0 °F	85 %	ESE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:24 AM	73.9 °F	69.2 °F	85 %	ESE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:29 AM	73.6 °F	69.0 °F	86 %	NE	0.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:34 AM	73.7 °F	69.0 °F	86 %	NNE	2.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:39 AM	73.7 °F	69.0 °F	86 %	NE	1.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:44 AM	73.7 °F	69.0 °F	86 %	ENE	1.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:49 AM	73.7 °F	69.0 °F	86 %	ENE	0.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:54 AM	73.5 °F	69.3 °F	87 %	NNE	2.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		12:59 AM	73.3 °F	69.0 °F	87 %	NNE	1.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:04 AM	73.2 °F	69.0 °F	87 %	NNE	1.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:09 AM	73.2 °F	69.0 °F	87 %	NE	1.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:14 AM	73.3 °F	69.0 °F	87 %	NE	1.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:19 AM	73.5 °F	69.7 °F	87 %	NE	1.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:24 AM	73.3 °F	69.0 °F	87 %	NE	1.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
10	6/25/2025 - 6/26/2025	1:29 AM	73.3 °F	69.0 °F	87 %	NE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in	3-6	Yes
		1:34 AM	73.3 °F	69.0 °F	87 %	NE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:39 AM	72.9 °F	69.0 °F	87 %	NE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:44 AM	72.8 °F	69.0 °F	88 %	NE	0.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:49 AM	72.6 °F	69.0 °F	88 %	NE	0.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:54 AM	72.4 °F	69.0 °F	88 %	NE	1.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:59 AM	72.6 °F	69.0 °F	88 %	NE	2.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:04 AM	72.7 °F	69.0 °F	88 %	ENE	2.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:09 AM	73.0 °F	69.0 °F	88 %	ENE	2.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:14 AM	72.8 °F	69.0 °F	88 %	ENE	1.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:19 AM	72.8 °F	69.0 °F	88 %	ENE	1.6 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:24 AM	72.8 °F	69.0 °F	88 %	ENE	2.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:29 AM	72.7 °F	69.0 °F	88 %	ENE	2.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:34 AM	72.6 °F	69.0 °F	88 %	ENE	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:39 AM	72.4 °F	69.0 °F	88 %	ENE	1.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:44 AM	72.1 °F	68.4 °F	88 %	ENE	1.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:49 AM	71.9 °F	68.8 °F	89 %	ENE	2.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:54 AM	72.0 °F	69.0 °F	89 %	ENE	2.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:59 AM	72.0 °F	69.0 °F	89 %	ENE	2.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:04 AM	71.7 °F	68.5 °F	89 %	ENE	2.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:09 AM	71.5 °F	68.3 °F	89 %	ENE	2.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:14 AM	71.5 °F	69.0 °F	90 %	ENE	1.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:19 AM	71.7 °F	69.0 °F	90 %	ENE	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:24 AM	71.8 °F	69.0 °F	90 %	NE	2.6 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:29 AM	71.8 °F	69.0 °F	90 %	NE	3.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:34 AM	71.8 °F	69.0 °F	90 %	ENE	3.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:39 AM	71.6 °F	68.5 °F	90 %	East	1.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:44 AM	71.5 °F	68.8 °F	90 %	East	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:49 AM	71.3 °F	68.3 °F	90 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:54 AM	70.6 °F	68.0 °F	90 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		3:59 AM	70.5 °F	68.0 °F	91 %	SSW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:04 AM	70.5 °F	68.0 °F	91 %	NNW	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:09 AM	70.7 °F	68.0 °F	92 %	North	1.1 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:14 AM	70.9 °F	68.7 °F	92 %	North	1.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:19 AM	70.9 °F	68.7 °F	92 %	North	1.3 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:24 AM	70.9 °F	68.9 °F	92 %	East	1.8 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:29 AM	70.9 °F	68.5 °F	92 %	ESE	1.1 mph	0.0 mph	30.01 in	0.00 in	0.00 in		
		4:34 AM	70.5 °F	68.0 °F	92 %	ESE	0.7 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:39 AM	70.4 °F	68.0 °F	92 %	ESE	0.0 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:44 AM	70.3 °F	68.0 °F	92 %	South	2.8 mph	0.0 mph	30.02 in	0.00 in	0.00 in		
		4:49 AM	70.2 °F	68.0 °F	92 %	South	0.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:54 AM	70.1 °F	68.0 °F	92 %	South	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		4:59 AM	70.2 °F	68.0 °F	92 %	South	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:04 AM	70.2 °F	68.0 °F	92 %	ESE	1.5 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:09 AM	70.0 °F	67.8 °F	92 %	ENE	1.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:14 AM	69.8 °F	67.2 °F	92 %	ENE	1.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:19 AM	70.0 °F	68.0 °F	92 %	ENE	0.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:24 AM	70.0 °F	68.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:29 AM	69.9 °F	68.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:34 AM	69.9 °F	68.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:39 AM	70.0 °F	68.0 °F	93 %	ENE	2.1 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:44 AM	70.2 °F	68.0 °F	93 %	NE	2.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:49 AM	70.3 °F	68.0 °F	93 %	NE	1.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:54 AM	70.3 °F	68.0 °F	93 %	NE	1.7 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		5:59 AM	70.4 °F	68.0 °F	93 %	NNE	2.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:04 AM	70.6 °F	68.6 °F	93 %	NNE	1.8 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:09 AM	70.7 °F	69.0 °F	93 %	NE	3.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:14 AM	70.7 °F	69.0 °F	93 %	NE	2.3 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:19 AM	70.6 °F	69.0 °F	93 %	NNE	2.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:24 AM	70.7 °F	69.0 °F	93 %	NNE	1.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:29 AM	70.7 °F	68.9 °F	93 %	NE	1.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:34 AM	70.4 °F	68.0 °F	93 %	ENE	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:39 AM	70.4 °F	68.0 °F	93 %	ENE	2.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:44 AM	70.4 °F	68.2 °F	93 %	ENE	1.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		6:49 AM	70.2 °F	68.0 °F	93 %	ENE	1.2 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:54 AM	70.3 °F	68.7 °F	94 %	ENE	0.4 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		6:59 AM	70.5 °F	68.7 °F	94 %	ENE	0.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		7:04 AM	70.5 °F	68.6 °F	94 %	ENE	0.0 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
	Sunrise	6:34 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:25 PM											
		7:54 PM	74.2 °F	70.0 °F	87 %	ESE	2.9 mph	0.0 mph	30.03 in	0.01 in	0.09 in		
		7:59 PM	74.3 °F	70.6 °F	88 %	ESE	3.8 mph	0.0 mph	30.03 in	0.00 in	0.09 in		
		8:04 PM	74.2 °F	70.9 °F	88 %	SE	3.8 mph	0.0 mph	30.03 in	0.00 in	0.09 in		
		8:09 PM	74.0 °F	71.0 °F	89 %	SE	3.8 mph	0.0 mph	30.03 in	0.00 in	0.09 in		
		8:14 PM	74.0 °F	71.0 °F	89 %	ESE	3.6 mph	0.0 mph	30.03 in	0.00 in	0.09 in		
		8:19 PM	73.8 °F	70.3 °F	89 %	ESE	3.7 mph	0.0 mph	30.03 in	0.00 in	0.09 in		
		8:24 PM	73.8 °F	70.4 °F	89 %	SE	2.4 mph	0.0 mph	30.04 in	0.00 in	0.09 in		
		8:29 PM	73.6 °F	70.4 °F	89 %	South	2.7 mph	0.0 mph	30.04 in	0.00 in	0.09 in		
		8:34 PM	73.4 °F	70.3 °F	90 %	SSW	3.6 mph	0.0 mph	30.04 in	0.00 in	0.09 in		
		8:39 PM	73.2 °F	70.0 °F	90 %	SW	3.9 mph	0.0 mph	30.04 in	0.00 in	0.09 in		
		8:44 PM	73.1 °F	70.0 °F	90 %	SW	3.7 mph	0.0 mph	30.04 in	0.00 in	0.09 in		
		8:49 PM	73.1 °F	70.0 °F	90 %	West	3.7 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		8:54 PM	73.2 °F	70.9 °F	91 %	WNW	3.3 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		8:59 PM	73.2 °F	70.8 °F	91 %	WNW	2.5 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:04 PM	73.1 °F	70.1 °F	91 %	NW	2.2 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:09 PM	72.9 °F	70.8 °F	92 %	NNW	2.7 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:14 PM	72.9 °F	71.0 °F	92 %	NNW	2.3 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:19 PM	72.8 °F	70.1 °F	92 %	NNW	2.0 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:24 PM	72.8 °F	70.4 °F	92 %	NNW	0.3 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:29 PM	72.8 °F	70.5 °F	92 %	NNW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:34 PM	72.8 °F	70.4 °F	92 %	SW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:39 PM	72.8 °F	70.3 °F	92 %	SW	0.0 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:44 PM	73.1 °F	71.0 °F	92 %	SSE	1.8 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:49 PM	73.1 °F	71.0 °F	92 %	SSE	1.0 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:54 PM	73.0 °F	71.0 °F	92 %	SSE	0.1 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		9:59 PM	73.1 °F	71.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		10:04 PM	72.9 °F	70.8 °F	92 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		10:09 PM	72.7 °F	70.0 °F	92 %	SSE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		10:14 PM	72.6 °F	70.0 °F	92 %	NNE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		10:19 PM	72.4 °F	70.0 °F	93 %	NE	1.2 mph	0.0 mph	30.05 in	0.00 in	0.09 in		
		10:24 PM	72.4 °F	70.0 °F	93 %	NE	0.5 mph	0.0 mph	30.06 in	0.00 in	0.09 in		
		10:29 PM	72.5 °F	70.0 °F	92 %	East	0.0 mph	0.0 mph	30.06 in	0.00 in	0.09 in		
		10:34 PM	72.6 °F	70.0 °F	92 %	East	0.6 mph	0.0 mph	30.06 in	0.00 in	0.09 in		
		10:39 PM	72.5 °F	70.1 °F	93 %	ENE	1.8 mph	0.0 mph	30.06 in	0.00 in	0.09 in		
		10:44 PM	72.4 °F	70.0 °F	93 %	ENE	2.5 mph	0.0 mph	30.06 in	0.00 in	0.09 in		
		10:49 PM	72.5 °F	70.2 °F	93 %	ENE	0.6 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		10:54 PM	72.5 °F	70.1 °F	93 %	ENE	0.3 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		10:59 PM	72.5 °F	70.1 °F	93 %	ENE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:04 PM	72.3 °F	70.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:09 PM	72.3 °F	70.0 °F	93 %	NE	1.0 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:14 PM	72.2 °F	70.0 °F	93 %	NE	1.9 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:19 PM	72.3 °F	70.0 °F	93 %	NE	1.0 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:24 PM	72.2 °F	70.0 °F	93 %	NE	0.0 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:29 PM	72.3 °F	70.0 °F	93 %	ENE	0.5 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:34 PM	72.3 °F	70.0 °F	93 %	ENE	2.9 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:39 PM	72.1 °F	70.0 °F	92 %	East	2.9 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:44 PM	72.1 °F	70.0 °F	92 %	ESE	3.1 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:49 PM	72.0 °F	70.0 °F	92 %	East	2.9 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:54 PM	72.0 °F	70.0 °F	92 %	East	2.4 mph	0.0 mph	30.07 in	0.00 in	0.09 in		
		11:59 PM	72.0 °F	70.0 °F	92 %	ESE	2.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:04 AM	72.1 °F	70.0 °F	92 %	ESE	2.8 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:09 AM	72.1 °F	70.0 °F	92 %	East	3.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:14 AM	72.2 °F	70.0 °F	92 %	ESE	3.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:19 AM	72.2 °F	70.0 °F	92 %	ESE	3.4 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:24 AM	72.2 °F	70.0 °F	92 %	East	2.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:29 AM	72.3 °F	70.0 °F	92 %	East	3.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:34 AM	72.3 °F	70.0 °F	92 %	East	4.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:39 AM	72.1 °F	70.0 °F	92 %	East	3.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:44 AM	72.1 °F	70.0 °F	92 %	East	3.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:49 AM	72.0 °F	70.0 °F	92 %	ENE	2.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		12:54 AM	72.1 °F	70.0 °F	92 %	ENE	3.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		12:59 AM	72.1 °F	70.0 °F	92 %	ENE	3.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:04 AM	72.1 °F	70.0 °F	92 %	NE	2.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:09 AM	72.0 °F	70.0 °F	92 %	NE	2.9 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:14 AM	72.0 °F	70.0 °F	92 %	NE	2.4 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:19 AM	72.0 °F	70.0 °F	92 %	ENE	1.9 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:24 AM	72.0 °F	70.0 °F	93 %	ENE	2.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
11	6/26/2025 - 6/27/2025	1:29 AM	72.1 °F	70.0 °F	93 %	ENE	2.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in	3-6	Yes
		1:34 AM	72.1 °F	70.0 °F	93 %	ENE	2.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:39 AM	72.1 °F	70.0 °F	93 %	NE	2.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:44 AM	72.1 °F	70.0 °F	93 %	NE	1.9 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:49 AM	72.1 °F	70.0 °F	93 %	NE	1.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:54 AM	72.1 °F	70.0 °F	93 %	NE	1.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		1:59 AM	72.0 °F	70.0 °F	93 %	NE	0.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:04 AM	72.0 °F	70.0 °F	93 %	ENE	1.2 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:09 AM	71.9 °F	69.8 °F	92 %	ENE	1.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:14 AM	71.8 °F	69.5 °F	93 %	ENE	0.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:19 AM	71.8 °F	69.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:24 AM	71.9 °F	69.7 °F	93 %	ENE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:29 AM	71.9 °F	70.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:34 AM	71.9 °F	70.0 °F	93 %	ENE	0.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:39 AM	71.8 °F	70.0 °F	93 %	ENE	0.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:44 AM	71.7 °F	70.0 °F	93 %	ENE	1.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:49 AM	71.8 °F	70.0 °F	93 %	ENE	1.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:54 AM	71.8 °F	70.0 °F	93 %	ENE	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:59 AM	71.8 °F	70.0 °F	93 %	ENE	2.1 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:04 AM	71.9 °F	70.0 °F	93 %	ENE	0.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:09 AM	71.9 °F	70.0 °F	93 %	ENE	1.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:14 AM	71.8 °F	70.0 °F	93 %	NE	1.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:19 AM	71.7 °F	70.0 °F	93 %	NE	1.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:24 AM	71.6 °F	69.9 °F	93 %	NE	1.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:29 AM	71.6 °F	69.9 °F	93 %	NE	1.6 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:34 AM	71.7 °F	70.0 °F	93 %	ENE	1.8 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:39 AM	71.7 °F	70.0 °F	93 %	ENE	1.5 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:44 AM	71.7 °F	70.0 °F	93 %	East	2.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:49 AM	71.7 °F	70.0 °F	93 %	East	4.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:54 AM	71.7 °F	70.0 °F	93 %	East	3.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:59 AM	71.7 °F	70.0 °F	93 %	ESE	2.7 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:04 AM	71.7 °F	70.0 °F	93 %	ESE	2.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:09 AM	71.8 °F	70.0 °F	93 %	East	3.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:14 AM	71.8 °F	70.0 °F	93 %	East	3.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:19 AM	71.8 °F	70.0 °F	93 %	East	2.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:24 AM	71.9 °F	70.0 °F	93 %	East	0.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:29 AM	71.8 °F	70.0 °F	93 %	East	0.8 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:34 AM	71.8 °F	70.0 °F	93 %	East	1.5 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:39 AM	72.0 °F	70.0 °F	93 %	East	2.0 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:44 AM	72.1 °F	70.0 °F	93 %	East	1.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:49 AM	72.1 °F	70.0 °F	93 %	East	2.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:54 AM	72.1 °F	70.0 °F	93 %	East	2.1 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		4:59 AM	72.1 °F	70.0 °F	93 %	East	1.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:04 AM	72.1 °F	70.0 °F	93 %	East	1.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:09 AM	72.1 °F	70.0 °F	93 %	East	2.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:14 AM	72.1 °F	70.0 °F	93 %	ESE	1.7 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:19 AM	72.1 °F	70.0 °F	93 %	ESE	0.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:24 AM	72.1 °F	70.0 °F	93 %	ESE	0.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:29 AM	72.3 °F	70.0 °F	93 %	ESE	0.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:34 AM	72.3 °F	70.0 °F	93 %	ESE	1.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:39 AM	72.3 °F	70.0 °F	93 %	ESE	1.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:44 AM	72.3 °F	70.0 °F	93 %	ESE	1.8 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		5:49 AM	72.2 °F	70.0 °F	93 %	ESE	1.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:54 AM	72.2 °F	70.0 °F	93 %	ESE	1.8 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:59 AM	72.2 °F	70.0 °F	93 %	ESE	2.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:04 AM	72.2 °F	70.0 °F	93 %	ESE	2.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:09 AM	72.1 °F	70.0 °F	93 %	East	1.6 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:14 AM	72.2 °F	70.0 °F	93 %	East	2.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:19 AM	72.2 °F	70.0 °F	94 %	ENE	2.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:24 AM	72.1 °F	70.0 °F	94 %	ENE	3.0 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		6:29 AM	72.1 °F	70.0 °F	93 %	ENE	2.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:34 AM	72.2 °F	70.1 °F	94 %	ENE	1.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:39 AM	72.2 °F	70.1 °F	94 %	ENE	0.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:44 AM	72.1 °F	70.0 °F	94 %	ENE	0.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:49 AM	72.1 °F	70.0 °F	94 %	ENE	1.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:54 AM	72.1 °F	70.0 °F	94 %	ENE	2.3 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:59 AM	72.2 °F	70.0 °F	94 %	ENE	2.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		7:04 AM	72.2 °F	70.1 °F	94 %	ENE	3.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
	Sunrise	6:34 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:25 PM											
		7:54 PM	74.5 °F	71.4 °F	90 %	East	4.0 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		7:59 PM	74.7 °F	72.0 °F	90 %	East	3.9 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:04 PM	74.6 °F	72.0 °F	90 %	ENE	3.4 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:09 PM	74.5 °F	72.0 °F	91 %	East	3.9 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:14 PM	74.5 °F	72.0 °F	91 %	ENE	2.9 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:19 PM	74.4 °F	72.0 °F	91 %	East	3.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		8:24 PM	74.5 °F	72.0 °F	91 %	NE	2.3 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:29 PM	74.3 °F	72.0 °F	91 %	ENE	2.2 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:34 PM	74.2 °F	71.5 °F	91 %	NE	2.4 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:39 PM	74.1 °F	71.5 °F	91 %	ENE	2.2 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:44 PM	74.1 °F	71.0 °F	91 %	NE	2.5 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:49 PM	74.0 °F	71.0 °F	91 %	NNE	1.9 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:54 PM	73.9 °F	71.0 °F	91 %	ENE	1.5 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		8:59 PM	73.9 °F	71.0 °F	91 %	ENE	0.5 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		9:04 PM	74.0 °F	71.0 °F	91 %	ENE	0.9 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
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		9:19 PM	74.1 °F	71.0 °F	90 %	ENE	2.8 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		9:24 PM	74.2 °F	71.0 °F	90 %	ENE	2.5 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		9:29 PM	74.1 °F	71.1 °F	91 %	ENE	3.1 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		9:34 PM	74.1 °F	71.1 °F	91 %	East	3.2 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		9:39 PM	73.9 °F	71.0 °F	91 %	ENE	2.4 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
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		9:54 PM	73.8 °F	71.0 °F	91 %	East	0.3 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		9:59 PM	73.7 °F	71.0 °F	91 %	East	0.0 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		10:04 PM	73.6 °F	71.0 °F	91 %	East	0.0 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		10:09 PM	73.4 °F	71.0 °F	91 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
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		10:44 PM	73.3 °F	71.0 °F	91 %	ENE	2.8 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		10:49 PM	73.3 °F	71.0 °F	91 %	ENE	1.7 mph	0.0 mph	30.10 in	0.00 in	0.01 in		
		10:54 PM	73.1 °F	70.8 °F	92 %	ENE	2.0 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		10:59 PM	73.0 °F	70.7 °F	92 %	ENE	2.2 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:04 PM	72.9 °F	70.8 °F	92 %	ENE	1.9 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:09 PM	73.0 °F	71.0 °F	92 %	ENE	2.4 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:14 PM	72.9 °F	71.0 °F	92 %	East	3.8 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:19 PM	72.9 °F	71.0 °F	92 %	East	4.4 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:24 PM	72.9 °F	70.7 °F	92 %	ESE	5.6 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:29 PM	72.7 °F	70.0 °F	92 %	ESE	4.4 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:34 PM	72.7 °F	70.0 °F	92 %	ESE	3.7 mph	0.0 mph	30.11 in	0.00 in	0.01 in		
		11:39 PM	72.8 °F	70.0 °F	92 %	ESE	1.9 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:44 PM	72.9 °F	70.2 °F	91 %	ESE	2.1 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:49 PM	72.9 °F	70.0 °F	91 %	SE	2.3 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:54 PM	72.9 °F	70.0 °F	91 %	ESE	2.5 mph	0.0 mph	30.12 in	0.00 in	0.01 in		
		11:59 PM	72.9 °F	70.0 °F	91 %	ESE	2.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:04 AM	72.9 °F	70.0 °F	91 %	ESE	2.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:09 AM	72.8 °F	70.0 °F	91 %	ESE	2.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:14 AM	72.8 °F	70.0 °F	91 %	ESE	2.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:19 AM	72.8 °F	70.0 °F	91 %	ESE	2.4 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:24 AM	72.8 °F	70.0 °F	91 %	East	2.6 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:29 AM	72.6 °F	70.0 °F	91 %	East	2.8 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:34 AM	72.5 °F	70.0 °F	91 %	East	2.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:39 AM	72.4 °F	70.0 °F	91 %	East	1.6 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:44 AM	72.5 °F	70.0 °F	91 %	East	0.1 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
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		12:54 AM	72.6 °F	70.0 °F	91 %	SE	0.5 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:59 AM	72.7 °F	70.0 °F	91 %	SE	1.9 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:04 AM	72.7 °F	70.0 °F	91 %	SE	2.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:09 AM	72.6 °F	70.0 °F	91 %	SE	1.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
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		1:19 AM	72.3 °F	70.0 °F	91 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:24 AM	72.2 °F	70.0 °F	92 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
12	6/27/2025 - 6/28/2025	1:29 AM	72.1 °F	70.0 °F	92 %	SE	0.7 mph	0.0 mph	30.11 in	0.00 in	0.00 in	3-6	Yes
		1:34 AM	72.2 °F	70.0 °F	92 %	SE	0.8 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:39 AM	72.2 °F	70.0 °F	92 %	SE	1.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:44 AM	72.1 °F	70.0 °F	92 %	SE	0.7 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
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		2:49 AM	72.1 °F	70.0 °F	92 %	SE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:54 AM	72.1 °F	70.0 °F	92 %	SE	0.5 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		2:59 AM	72.0 °F	70.0 °F	92 %	SE	2.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		3:04 AM	72.1 °F	70.0 °F	92 %	SE	0.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
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		7:04 AM	71.5 °F	70.0 °F	94 %	ENE	0.2 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		7:09 AM	71.7 °F	70.0 °F	94 %	ENE	2.7 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
	Sunrise	6:35 AM											

Appendix E - Weather Data
Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
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		8:29 PM	73.8 °F	71.0 °F	91 %	ESE	**9.7 mph**	17.3 mph	30.12 in	0.00 in	0.14 in		
		8:34 PM	73.5 °F	71.0 °F	91 %	ESE	**10.5 mph**	13.8 mph	30.12 in	0.00 in	0.14 in		
		8:39 PM	73.2 °F	70.4 °F	90 %	ESE	8.7 mph	0.0 mph	30.12 in	0.00 in	0.14 in		
		8:44 PM	73.0 °F	70.0 °F	91 %	East	6.0 mph	0.0 mph	30.12 in	0.00 in	0.14 in		
		8:49 PM	72.9 °F	70.0 °F	91 %	ESE	6.3 mph	0.0 mph	30.12 in	0.00 in	0.14 in		
		8:54 PM	72.7 °F	70.0 °F	91 %	ESE	5.1 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		8:59 PM	72.6 °F	70.0 °F	91 %	ESE	6.8 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		9:04 PM	72.5 °F	69.8 °F	90 %	ESE	6.8 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		9:09 PM	72.5 °F	70.0 °F	90 %	ESE	6.3 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		9:14 PM	72.6 °F	69.9 °F	90 %	ESE	6.3 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		9:19 PM	72.6 °F	69.0 °F	89 %	ESE	5.2 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		9:24 PM	72.6 °F	69.0 °F	89 %	ESE	4.1 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		9:29 PM	72.7 °F	69.0 °F	89 %	ESE	5.8 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		9:34 PM	72.6 °F	69.0 °F	89 %	ESE	5.7 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		9:39 PM	72.7 °F	69.3 °F	89 %	ESE	4.8 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		9:44 PM	72.8 °F	69.8 °F	89 %	ESE	3.5 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		9:49 PM	72.8 °F	70.0 °F	89 %	ESE	4.5 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		9:54 PM	72.9 °F	69.5 °F	89 %	ESE	3.9 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		9:59 PM	73.0 °F	69.0 °F	88 %	ESE	4.2 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		10:04 PM	73.0 °F	69.0 °F	88 %	ESE	5.1 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		10:09 PM	72.9 °F	69.0 °F	88 %	ESE	6.5 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		10:14 PM	73.0 °F	69.0 °F	87 %	ESE	6.4 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		10:19 PM	73.0 °F	69.0 °F	87 %	ESE	5.2 mph	0.0 mph	30.15 in	0.00 in	0.14 in		
		10:24 PM	72.9 °F	69.0 °F	87 %	East	6.6 mph	0.0 mph	30.15 in	0.00 in	0.14 in		
		10:29 PM	72.9 °F	69.0 °F	87 %	ESE	7.6 mph	0.0 mph	30.15 in	0.00 in	0.14 in		
		10:34 PM	72.9 °F	69.0 °F	87 %	ESE	7.7 mph	0.0 mph	30.15 in	0.00 in	0.14 in		
		10:39 PM	72.8 °F	68.4 °F	86 %	ESE	8.3 mph	0.0 mph	30.15 in	0.00 in	0.14 in		
		10:44 PM	72.9 °F	69.0 °F	86 %	ESE	6.5 mph	0.0 mph	30.15 in	0.00 in	0.14 in		
		10:49 PM	72.9 °F	68.0 °F	85 %	ESE	6.5 mph	0.0 mph	30.15 in	0.00 in	0.14 in		
		10:54 PM	72.8 °F	68.0 °F	85 %	ESE	5.5 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		10:59 PM	72.8 °F	68.0 °F	85 %	East	4.8 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		11:04 PM	72.7 °F	68.0 °F	85 %	East	4.2 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		11:09 PM	72.6 °F	68.0 °F	86 %	East	2.6 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		11:14 PM	72.6 °F	68.0 °F	86 %	East	2.4 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		11:19 PM	72.6 °F	68.0 °F	86 %	ENE	2.1 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		11:24 PM	72.5 °F	68.0 °F	86 %	ENE	2.8 mph	0.0 mph	30.14 in	0.00 in	0.14 in		
		11:29 PM	72.5 °F	68.0 °F	86 %	East	2.2 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		11:34 PM	72.5 °F	68.0 °F	86 %	East	2.0 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		11:39 PM	72.4 °F	68.0 °F	86 %	East	1.2 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		11:44 PM	72.3 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		11:49 PM	72.1 °F	68.0 °F	87 %	East	0.0 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		11:54 PM	72.0 °F	68.0 °F	88 %	East	0.0 mph	0.0 mph	30.13 in	0.00 in	0.14 in		
		11:59 PM	71.8 °F	68.0 °F	88 %	East	0.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:04 AM	71.7 °F	68.0 °F	88 %	NE	2.1 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:09 AM	71.6 °F	68.0 °F	88 %	NNE	2.3 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:14 AM	71.7 °F	68.0 °F	87 %	NNE	1.3 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:19 AM	71.8 °F	68.0 °F	87 %	NNE	1.9 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:24 AM	71.9 °F	68.0 °F	87 %	North	2.0 mph	0.0 mph	30.14 in	0.00 in	0.00 in		
		12:29 AM	71.9 °F	68.0 °F	87 %	NNW	1.6 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:34 AM	71.9 °F	68.0 °F	87 %	NNW	1.0 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:39 AM	72.0 °F	68.0 °F	87 %	NE	1.4 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:44 AM	72.1 °F	68.0 °F	87 %	ENE	0.1 mph	0.0 mph	30.13 in	0.00 in	0.00 in		
		12:49 AM	72.1 °F	68.0 °F	87 %	ENE	0.1 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:54 AM	72.2 °F	68.0 °F	87 %	SE	1.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:59 AM	72.1 °F	68.0 °F	87 %	SE	0.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:04 AM	71.9 °F	68.0 °F	87 %	SE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:09 AM	71.8 °F	68.0 °F	88 %	SE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:14 AM	71.7 °F	68.0 °F	88 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:19 AM	71.6 °F	68.0 °F	88 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:24 AM	71.4 °F	68.0 °F	88 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
13	6/28/2025 - 6/29/2025	1:29 AM	71.3 °F	68.0 °F	89 %	SE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in	3-6	Yes
		1:34 AM	71.3 °F	68.0 °F	89 %	North	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:39 AM	71.4 °F	68.0 °F	89 %	North	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:44 AM	71.6 °F	68.0 °F	88 %	North	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:49 AM	71.6 °F	68.0 °F	89 %	North	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		1:54 AM	71.6 °F	68.0 °F	89 %	North	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:59 AM	71.5 °F	68.0 °F	89 %	North	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:04 AM	71.6 °F	68.0 °F	89 %	North	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:09 AM	71.6 °F	68.0 °F	89 %	North	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:14 AM	71.6 °F	68.0 °F	89 %	North	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		2:19 AM	71.6 °F	68.0 °F	89 %	North	0.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:24 AM	71.7 °F	68.0 °F	89 %	NNW	2.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:29 AM	71.7 °F	68.1 °F	89 %	NW	0.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:34 AM	71.9 °F	69.0 °F	89 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:39 AM	71.8 °F	69.0 °F	89 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:44 AM	71.8 °F	69.0 °F	89 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:49 AM	71.8 °F	68.8 °F	89 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:54 AM	71.8 °F	68.0 °F	88 %	NW	0.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		2:59 AM	71.8 °F	68.0 °F	88 %	NW	1.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:04 AM	71.8 °F	68.0 °F	88 %	NW	2.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:09 AM	71.8 °F	68.0 °F	88 %	NW	1.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:14 AM	71.9 °F	68.0 °F	88 %	NW	1.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:19 AM	71.9 °F	68.0 °F	88 %	NW	1.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:24 AM	71.9 °F	68.0 °F	88 %	NW	1.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:29 AM	71.8 °F	68.0 °F	88 %	NW	2.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:34 AM	71.8 °F	68.0 °F	88 %	NW	2.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:39 AM	71.8 °F	68.0 °F	88 %	NW	0.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:44 AM	71.8 °F	68.7 °F	89 %	West	0.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:49 AM	71.7 °F	68.2 °F	89 %	WSW	2.5 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:53 AM	71.7 °F	68.3 °F	89 %	WSW	1.7 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		3:59 AM	71.6 °F	68.0 °F	89 %	WSW	1.6 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:04 AM	71.7 °F	68.2 °F	89 %	WSW	0.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:09 AM	71.8 °F	68.5 °F	89 %	WSW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:14 AM	71.7 °F	68.4 °F	89 %	WSW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:19 AM	71.7 °F	68.6 °F	90 %	WSW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:24 AM	71.6 °F	69.0 °F	90 %	NW	1.3 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:29 AM	71.7 °F	69.0 °F	90 %	NNW	2.2 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:34 AM	71.7 °F	69.0 °F	90 %	North	1.1 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:39 AM	71.7 °F	68.1 °F	89 %	NNE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:44 AM	71.8 °F	68.9 °F	89 %	NNE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:49 AM	71.9 °F	69.0 °F	90 %	NNE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:54 AM	71.9 °F	69.0 °F	90 %	NNE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:59 AM	72.0 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:04 AM	72.0 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:09 AM	72.1 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:14 AM	72.1 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:19 AM	72.3 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:24 AM	72.3 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:29 AM	72.3 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:34 AM	72.1 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:39 AM	71.9 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:44 AM	72.0 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:49 AM	72.0 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:54 AM	71.9 °F	69.0 °F	89 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		5:59 AM	72.0 °F	69.0 °F	90 %	NNE	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		6:04 AM	72.1 °F	69.0 °F	89 %	NNE	1.3 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:09 AM	72.1 °F	69.0 °F	89 %	NNE	1.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:14 AM	72.1 °F	69.0 °F	90 %	NNE	2.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:19 AM	72.1 °F	69.0 °F	90 %	ENE	2.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:24 AM	72.1 °F	69.0 °F	90 %	ENE	1.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:29 AM	72.1 °F	69.0 °F	90 %	ENE	0.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:34 AM	72.0 °F	69.0 °F	90 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:39 AM	72.1 °F	69.0 °F	90 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:44 AM	71.9 °F	69.0 °F	90 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:49 AM	72.0 °F	69.0 °F	91 %	ENE	0.0 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:54 AM	72.1 °F	69.0 °F	91 %	ENE	1.4 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		6:59 AM	72.0 °F	69.0 °F	91 %	ENE	2.2 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		7:04 AM	71.9 °F	69.0 °F	91 %	East	2.7 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
		7:09 AM	72.1 °F	69.0 °F	91 %	East	2.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
	Sunrise	6:35 AM											

Appendix E - Weather Data

Stations 30-37

Survey Day	Date	Time	Temperature	Dew Point	Humidity	Wind	Speed	Gust	Pressure	Precip. Rate.	Precip. Accum.	Stations	Within Weather Parameters
	Sunset	8:25 PM											
		7:54 PM	73.2 °F	70.7 °F	91 %	NNE	2.9 mph	0.0 mph	30.08 in	**0.01 in**	0.07 in		
		7:59 PM	73.2 °F	71.0 °F	91 %	NE	1.8 mph	0.0 mph	30.08 in	**0.01 in**	0.07 in		
		8:04 PM	73.2 °F	71.0 °F	92 %	NNE	2.0 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		8:09 PM	73.2 °F	70.9 °F	92 %	ENE	2.9 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		8:14 PM	73.2 °F	71.0 °F	92 %	ENE	3.5 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		8:19 PM	73.2 °F	71.0 °F	92 %	ENE	2.9 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		8:24 PM	73.3 °F	71.0 °F	92 %	East	3.7 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		8:29 PM	73.3 °F	71.0 °F	92 %	ENE	4.1 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		8:34 PM	73.1 °F	71.0 °F	92 %	East	5.2 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		8:39 PM	72.9 °F	70.8 °F	92 %	ESE	6.4 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		8:44 PM	72.8 °F	70.1 °F	92 %	ESE	6.6 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		8:49 PM	72.8 °F	70.0 °F	92 %	ESE	6.9 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		8:54 PM	72.8 °F	70.0 °F	92 %	ESE	6.8 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		8:59 PM	72.7 °F	70.0 °F	92 %	ESE	6.6 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		9:04 PM	72.6 °F	70.0 °F	92 %	ESE	6.7 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		9:09 PM	72.6 °F	70.0 °F	92 %	ESE	7.4 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		9:14 PM	72.6 °F	70.0 °F	92 %	ESE	7.7 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		9:19 PM	72.6 °F	70.0 °F	92 %	East	7.8 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		9:24 PM	72.5 °F	70.0 °F	92 %	East	8.5 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		9:29 PM	72.5 °F	70.0 °F	92 %	East	7.4 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		9:34 PM	72.5 °F	70.0 °F	92 %	ESE	6.6 mph	0.0 mph	30.08 in	0.00 in	0.07 in		
		9:39 PM	72.5 °F	70.0 °F	92 %	ESE	7.3 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		9:44 PM	72.6 °F	70.0 °F	92 %	ESE	9.0 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		9:49 PM	72.6 °F	70.0 °F	92 %	ESE	8.9 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		9:54 PM	72.7 °F	70.0 °F	92 %	ESE	**11.2 mph**	0.0 mph	30.09 in	0.00 in	0.07 in		
		9:59 PM	72.7 °F	70.0 °F	92 %	ESE	9.0 mph	0.0 mph	30.09 in	0.00 in	0.07 in		
		10:04 PM	72.7 °F	70.0 °F	92 %	ESE	8.3 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:09 PM	72.6 °F	70.0 °F	92 %	ESE	7.0 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:14 PM	72.6 °F	70.0 °F	92 %	ESE	6.4 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:19 PM	72.6 °F	70.0 °F	92 %	ESE	6.5 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:24 PM	72.7 °F	70.0 °F	92 %	ESE	6.0 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:29 PM	72.7 °F	70.0 °F	92 %	ESE	6.3 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:34 PM	72.7 °F	70.0 °F	92 %	ESE	5.6 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:39 PM	72.7 °F	70.0 °F	92 %	ESE	5.3 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:44 PM	72.7 °F	70.0 °F	92 %	ESE	4.5 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:49 PM	72.7 °F	70.0 °F	92 %	East	5.1 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:54 PM	72.8 °F	70.1 °F	92 %	East	4.3 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		10:59 PM	72.9 °F	70.7 °F	92 %	East	3.2 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		11:04 PM	72.9 °F	70.6 °F	92 %	ENE	2.7 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		11:09 PM	72.8 °F	70.3 °F	92 %	ENE	2.3 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		11:14 PM	72.8 °F	70.4 °F	92 %	NE	2.8 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		11:19 PM	72.8 °F	70.4 °F	92 %	ENE	3.2 mph	0.0 mph	30.11 in	0.00 in	0.07 in		
		11:24 PM	72.9 °F	70.9 °F	92 %	NE	2.5 mph	0.0 mph	30.10 in	0.00 in	0.07 in		
		11:29 PM	72.9 °F	70.9 °F	92 %	NE	1.8 mph	0.0 mph	30.11 in	0.00 in	0.07 in		
		11:34 PM	72.8 °F	70.0 °F	92 %	NE	1.4 mph	0.0 mph	30.11 in	0.00 in	0.07 in		
		11:39 PM	72.8 °F	70.0 °F	92 %	NE	1.6 mph	0.0 mph	30.11 in	0.00 in	0.07 in		
		11:44 PM	72.9 °F	70.9 °F	92 %	NE	2.1 mph	0.0 mph	30.11 in	0.00 in	0.07 in		
		11:49 PM	73.0 °F	71.0 °F	92 %	ENE	2.0 mph	0.0 mph	30.11 in	0.00 in	0.07 in		
		11:54 PM	72.9 °F	71.0 °F	92 %	ENE	0.3 mph	0.0 mph	30.11 in	0.00 in	0.07 in		
		11:59 PM	72.9 °F	71.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:04 AM	73.0 °F	71.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		12:09 AM	72.8 °F	70.3 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:14 AM	72.7 °F	70.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:19 AM	72.6 °F	70.0 °F	92 %	ENE	0.3 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:24 AM	72.6 °F	70.0 °F	92 %	ENE	1.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:29 AM	72.6 °F	70.0 °F	92 %	ENE	0.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:34 AM	72.6 °F	70.0 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:39 AM	72.6 °F	70.2 °F	92 %	ENE	0.0 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:44 AM	72.6 °F	70.4 °F	92 %	ENE	1.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:49 AM	72.6 °F	70.9 °F	93 %	ENE	1.7 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:54 AM	72.6 °F	70.9 °F	93 %	NNE	2.2 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		12:59 AM	72.6 °F	71.0 °F	93 %	NNE	1.5 mph	0.0 mph	30.12 in	0.00 in	0.00 in		
		1:04 AM	72.6 °F	71.0 °F	93 %	NNE	0.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:09 AM	72.6 °F	70.7 °F	93 %	NNE	0.3 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:14 AM	72.6 °F	70.9 °F	93 %	NNE	2.0 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:19 AM	72.5 °F	70.1 °F	93 %	NW	2.5 mph	0.0 mph	30.11 in	0.00 in	0.00 in		
		1:24 AM	72.5 °F	70.1 °F	93 %	NW	0.9 mph	0.0 mph	30.10 in	0.00 in	0.00 in		
14	6/29/2025 - 6/30/2025	1:29 AM	72.5 °F	70.4 °F	93 %	NW	0.1 mph	0.0 mph	30.10 in	0.00 in	0.00 in	3-6	Yes
		1:34 AM	72.6 °F	70.7 °F	93 %	ESE	1.4 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:39 AM	72.6 °F	70.8 °F	93 %	ESE	0.5 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		1:44 AM	72.7 °F	71.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:49 AM	72.6 °F	71.0 °F	93 %	ESE	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		1:54 AM	72.5 °F	70.3 °F	93 %	NW	1.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		1:59 AM	72.3 °F	70.0 °F	93 %	NW	2.2 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:04 AM	72.3 °F	70.0 °F	93 %	NNE	2.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		2:09 AM	72.3 °F	70.0 °F	93 %	ENE	1.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:14 AM	72.3 °F	70.0 °F	93 %	ENE	0.1 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:19 AM	72.3 °F	70.0 °F	93 %	NNW	0.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:24 AM	72.2 °F	70.0 °F	93 %	NW	3.3 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		2:29 AM	72.2 °F	70.0 °F	93 %	NW	2.4 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:34 AM	72.2 °F	70.0 °F	93 %	NW	1.6 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		2:39 AM	72.1 °F	70.0 °F	93 %	NW	1.3 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:44 AM	72.2 °F	70.0 °F	93 %	NW	0.7 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:49 AM	72.2 °F	70.0 °F	93 %	South	2.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:54 AM	72.1 °F	70.0 °F	93 %	ESE	3.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		2:59 AM	72.1 °F	70.0 °F	93 %	ESE	3.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:04 AM	72.1 °F	70.0 °F	93 %	ESE	3.4 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:09 AM	72.1 °F	70.0 °F	93 %	ESE	3.6 mph	0.0 mph	30.03 in	0.00 in	0.00 in		
		3:14 AM	72.0 °F	70.0 °F	93 %	ESE	2.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:19 AM	72.0 °F	70.0 °F	93 %	ESE	5.0 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:24 AM	72.0 °F	70.0 °F	93 %	ESE	6.2 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:29 AM	72.1 °F	70.0 °F	93 %	ESE	5.9 mph	0.0 mph	30.04 in	0.00 in	0.00 in		
		3:34 AM	72.2 °F	70.0 °F	93 %	ESE	5.6 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:39 AM	72.3 °F	70.0 °F	93 %	ESE	5.3 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:43 AM	72.5 °F	70.0 °F	92 %	SE	4.9 mph	0.0 mph	30.05 in	0.00 in	0.00 in		
		3:49 AM	72.6 °F	70.0 °F	92 %	SE	6.4 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:54 AM	72.6 °F	70.0 °F	92 %	ESE	3.5 mph	0.0 mph	30.06 in	0.00 in	0.00 in		
		3:59 AM	72.6 °F	70.0 °F	92 %	ESE	1.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		4:04 AM	72.6 °F	70.0 °F	92 %	NNW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		4:09 AM	72.5 °F	70.0 °F	92 %	NNW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		4:14 AM	72.4 °F	70.0 °F	92 %	NNW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:19 AM	72.4 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:24 AM	72.5 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:29 AM	72.4 °F	70.0 °F	92 %	NW	0.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:34 AM	72.4 °F	70.0 °F	92 %	NW	1.3 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:39 AM	72.4 °F	70.0 °F	92 %	NW	0.1 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:44 AM	72.3 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:49 AM	72.4 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.09 in	0.00 in	0.00 in		
		4:54 AM	72.4 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		4:59 AM	72.5 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:04 AM	72.6 °F	70.0 °F	91 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:09 AM	72.5 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:14 AM	72.4 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:19 AM	72.4 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:24 AM	72.2 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:29 AM	72.1 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		5:34 AM	72.1 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:39 AM	72.0 °F	70.0 °F	92 %	NW	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:44 AM	72.1 °F	70.0 °F	92 %	East	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:49 AM	72.0 °F	70.0 °F	92 %	East	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:54 AM	72.1 °F	70.0 °F	92 %	East	0.0 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		5:59 AM	72.2 °F	70.0 °F	92 %	East	1.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:04 AM	72.2 °F	70.0 °F	92 %	East	2.1 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:09 AM	72.3 °F	70.0 °F	92 %	East	1.6 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:14 AM	72.4 °F	70.0 °F	92 %	East	1.8 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:19 AM	72.3 °F	70.0 °F	92 %	East	1.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:24 AM	72.2 °F	70.0 °F	92 %	East	1.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:29 AM	72.1 °F	70.0 °F	92 %	East	1.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:34 AM	72.1 °F	70.0 °F	92 %	East	1.8 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:39 AM	71.9 °F	70.0 °F	92 %	East	1.4 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:44 AM	71.9 °F	70.0 °F	92 %	East	0.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:49 AM	71.9 °F	70.0 °F	92 %	East	0.7 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
		6:54 AM	72.0 °F	70.0 °F	92 %	East	0.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		6:59 AM	72.1 °F	70.0 °F	92 %	East	1.9 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		7:04 AM	72.1 °F	70.0 °F	92 %	East	3.0 mph	0.0 mph	30.08 in	0.00 in	0.00 in		
		7:09 AM	72.1 °F	70.0 °F	93 %	ESE	2.5 mph	0.0 mph	30.07 in	0.00 in	0.00 in		
	Sunrise	6:35 AM											

Appendix E

Acoustic Data Summary

Number of Kaleidoscope Pro Auto ID'd WAV files																Number of manually verified WAV files	
Station	**Total recorded files**	**Classifed as noise**	**Not assigned auto ID**	**Total auto ID'd to species level**	**Big brown bat (*Eptesicus fuscus*)**	**Eastern red bat (*Lasiurus borealis*)**	**Hoary bat (*Lasiurus cinereus*)**	**Northern yellow bat (*Lasiurus intermedius*)**	**Seminole bat (*Lasiurus seminolus*)**	**Southeastern myotis (*Myotis austroriparius*)**	**Northern Long-Eared Bat (*Myotis septentrionalis*)**	**Evening bat (*Nycticeius humeralis*)**	**Tricolored bat (*Perimyotis subflavus*)**	**Brazilian free-tailed bat (*Tadarida brasiliensis*)**	**Florida bonneted bat (*Eumops floridanus*)**	**Tricolored bat**	**Florida bonneted bat**
1	5,546	589	769	4,188	25	3	450	31	39	3	0	6	3	3,575	53	1	0
2	4,425	449	889	3,087	31	7	248	196	36	0	0	4	8	2,550	7	7	0
3	4,291	2,409	400	1,482	17	11	68	147	3	0	0	3	16	1,214	3	16	0
4	15,799	13,670	524	1,605	68	54	36	512	75	1	0	32	84	737	6	84	0
5	11,791	10,453	413	925	11	68	13	291	66	3	0	54	135	284	0	135	0
6	5,535	2,636	716	2,183	58	5	123	338	29	2	0	76	10	1,539	2	9	0
7	10,017	4,204	2,056	3,757	59	317	246	1,070	133	5	0	90	29	1,802	6	29	1
8	18,306	12,653	1,672	3,981	127	114	337	384	741	37	1	236	140	1,863	1	138	0
9	8,060	3,855	948	3,257	63	34	216	287	304	6	0	91	255	1,998	3	147	0
10	7,191	3,517	981	2,693	52	37	143	333	433	6	1	174	74	1,439	1	41	0
11	5,225	1,683	842	2,700	66	9	235	189	227	3	0	51	38	1,881	1	30	0
12	20,549	18,439	696	1,414	72	46	78	220	28	9	0	152	42	766	1	24	0
13	6,092	1,799	1,058	3,235	107	23	190	420	135	0	0	120	113	2,105	22	76	0
14	8,095	7,081	352	662	18	3	33	112	7	0	1	4	42	431	11	26	0
15	8,574	7,510	376	688	21	14	35	162	3	0	0	5	53	395	0	35	0
16	23,970	17,921	1,812	4,237	171	50	99	1,376	50	1	1	45	107	2,330	8	105	0
17	16,436	10,580	1,381	4,475	114	14	165	865	24	1	0	22	31	3,232	7	31	1
18	5,321	4,624	217	480	20	9	33	64	0	0	0	11	74	268	1	41	0
19	10,076	3,649	1,542	4,885	50	5	181	551	13	0	0	6	49	4,024	6	18	0
20	20,134	19,910	83	141	4	4	0	80	0	0	0	1	6	46	0	6	0
21	7,470	5,209	557	1,704	123	8	38	503	39	0	0	8	176	806	3	157	0
22	12,779	10,851	507	1,421	71	72	26	224	9	0	0	13	431	553	22	421	0
23	14,007	5,187	2,116	6,704	115	16	269	1,220	106	0	0	2	18	4,957	1	18	0
24	11,743	5,236	2,108	4,399	307	339	93	1,627	282	0	0	128	30	1,592	1	25	0
25	3,353	898	636	1,819	57	1	82	326	16	0	0	0	0	1,323	14	0	0
26	6,167	4,947	377	843	18	0	59	94	0	0	0	0	5	666	1	5	0
27	13,753	11,152	724	1,877	38	8	46	450	16	0	0	9	46	1,263	1	42	0
28	2,625	1,048	398	1,179	13	2	26	132	1	0	1	5	55	931	13	48	0
29	4,586	1,228	761	2,597	38	5	51	408	3	0	0	4	35	2,051	2	35	0
30	7,063	2,175	1,316	3,572	499	0	224	947	7	0	0	6	3	1,880	6	3	0
31	17,824	14,170	1,422	2,232	84	0	108	618	8	0	0	3	8	1,276	127	3	0
32	3,687	1,064	692	1,931	171	2	123	605	9	0	0	45	9	965	2	9	0
33	4,756	1,810	950	1,996	202	2	57	325	3	0	0	11	3	1,390	3	2	0
34	6,178	3,611	716	1,851	98	2	143	502	3	0	0	4	0	1,096	3	0	0
35	2,716	926	583	1,207	151	7	85	351	5	0	0	2	0	604	2	0	0
36	4,695	2,782	842	1,071	77	20	62	218	8	0	1	32	3	597	53	1	0
37	15,180	11,976	911	2,293	248	2	119	647	6	2	0	17	2	1,247	3	0	0
Totals	**354,015**	**231,901**	**33,343**	**88,771**	**3,464**	**1,313**	**4,540**	**16,825**	**2,867**	**79**	**6**	**1,472**	**2,133**	**55,676**	**396**	**1,768**	**2**
Percentages		**65.51%**	**9.42%**	**25.08%**	**0.98%**	**0.37%**	**1.28%**	**4.75%**	**0.81%**	**0.02%**	**0.00%**	**0.42%**	**0.60%**	**15.73%**	**0.11%**	**0.50%**	**0.00%**

NOTE:
The following species were not included in Kaleidoscope Pro analysis due to rarity in South Florida: silver haired bat, fringed myotis, Palla's mastiff bat, gray myotis, and little brown myotis.

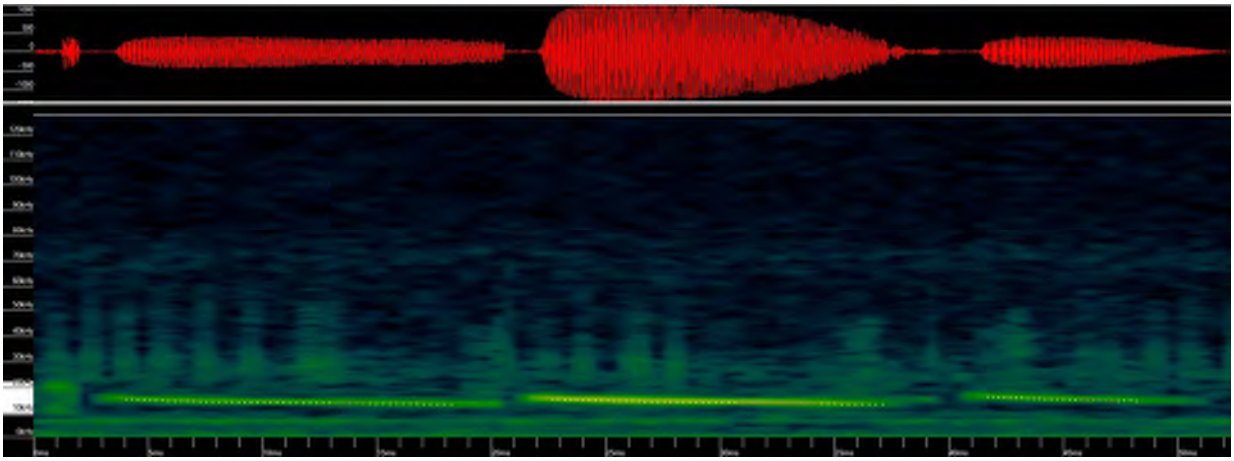
Appendix F

Florida Bonneted Bat and Tricolored Bat Results

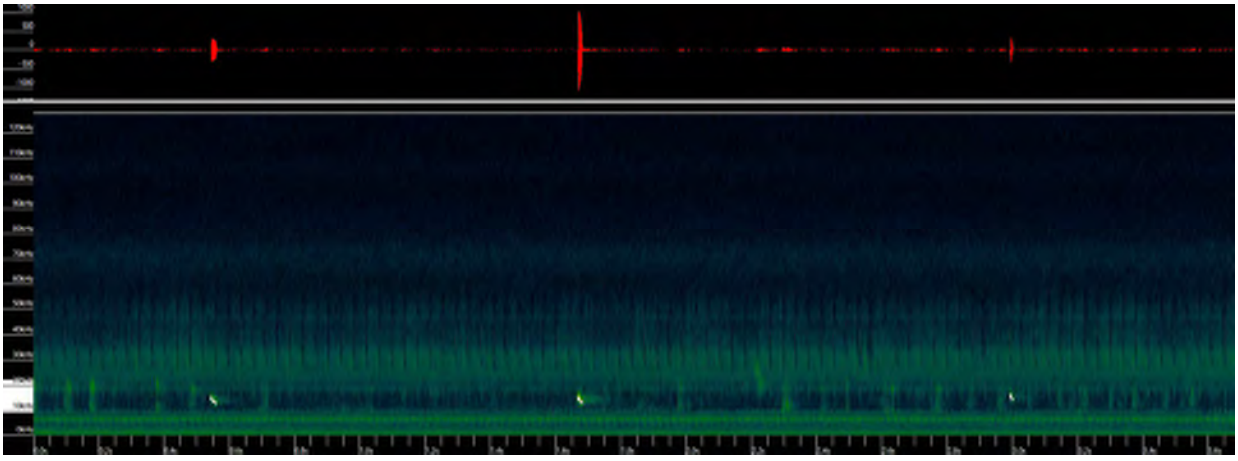
Florida Bonneted Bat Results: Verified Florida Bonneted Bat Call

AutoID FBB Call. Detector 17 File ID: SR-70-17-10_20250530_214907.wav
5-30-2025 21:49:07 (EDT)

Example of **EUMFLO** from Detector 17



Compressed view

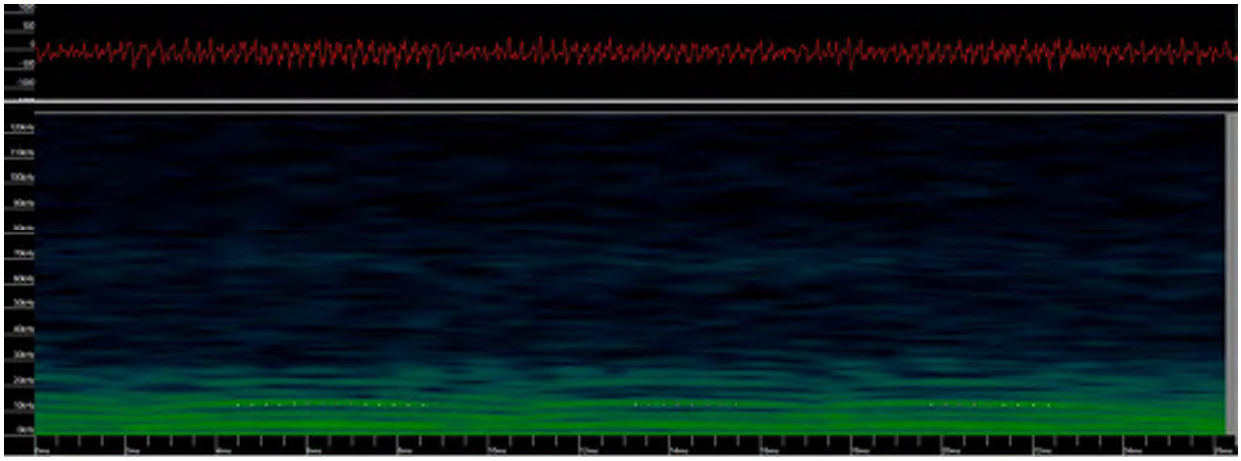


Normal time view

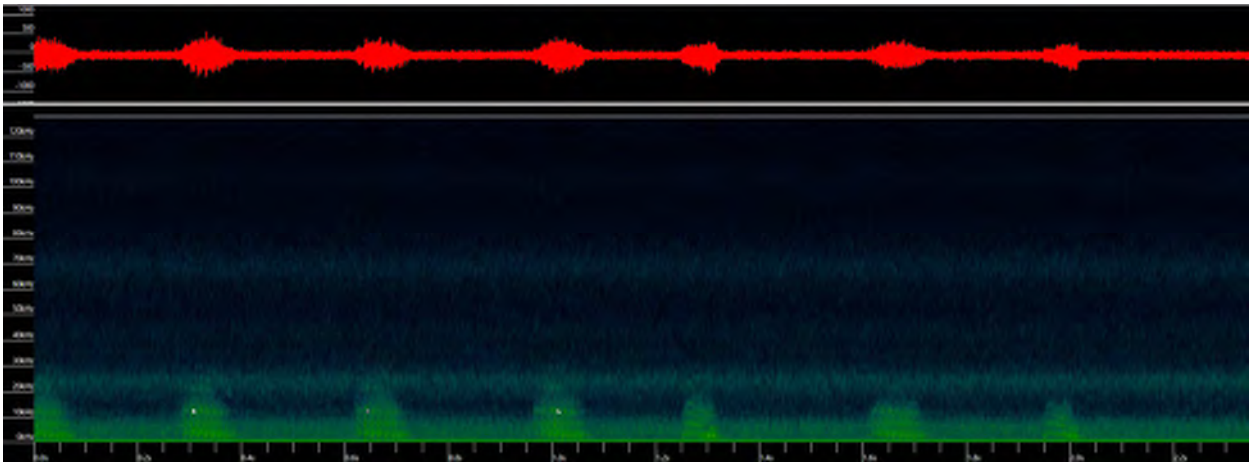
Florida Bonneted Bat Results: Misclassified Florida Bonneted Bat Calls

AutoID FBB Call. Detector 2 File ID: SR-70-2-9_20250607_053743.wav
6-7-2025 05:37:43 (EDT)

Example of **Bird** from Detector 2



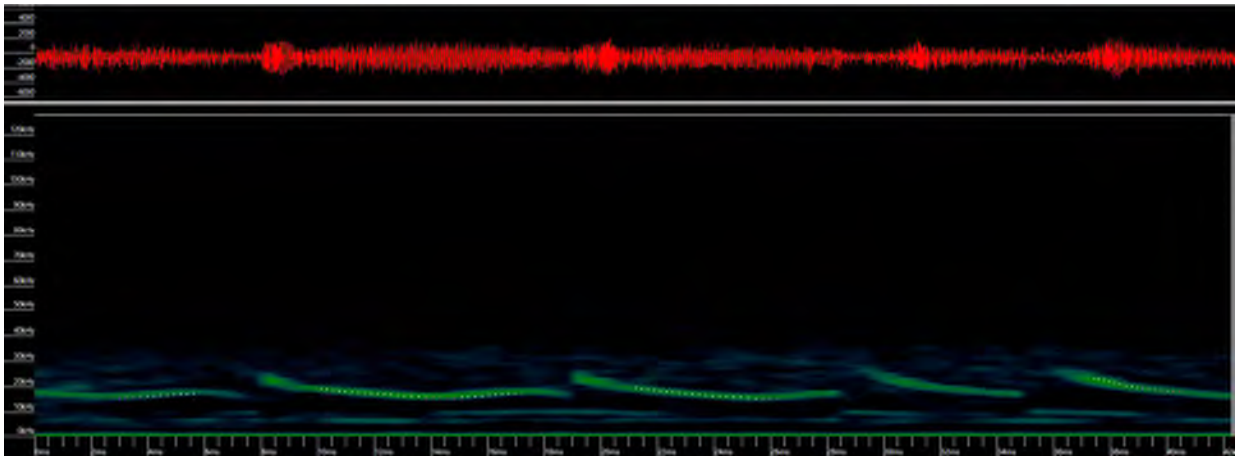
Compressed view



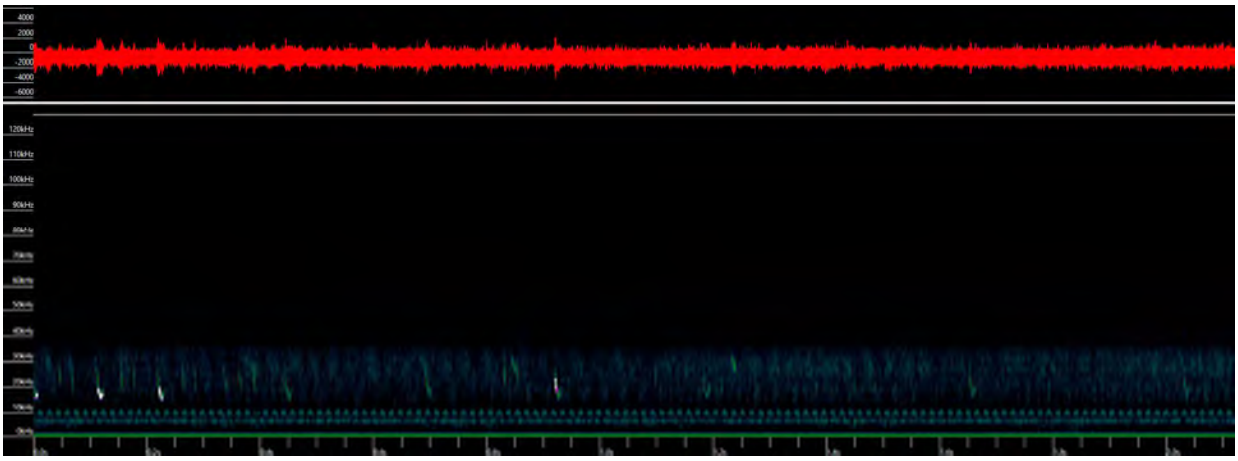
Normal time view

AutoID FBB Call. Detector 2 File ID: SR-70-2-9_20250607_004858.wav
6-7-2025 00:48:58 (EDT)

Example of **Social Calls from other Species** from Detector 2



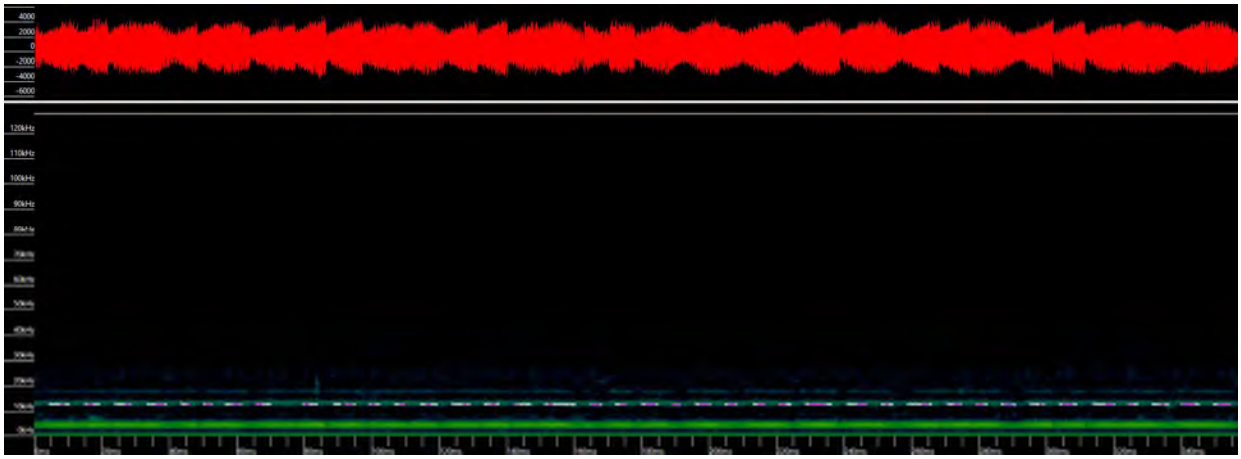
Compressed view



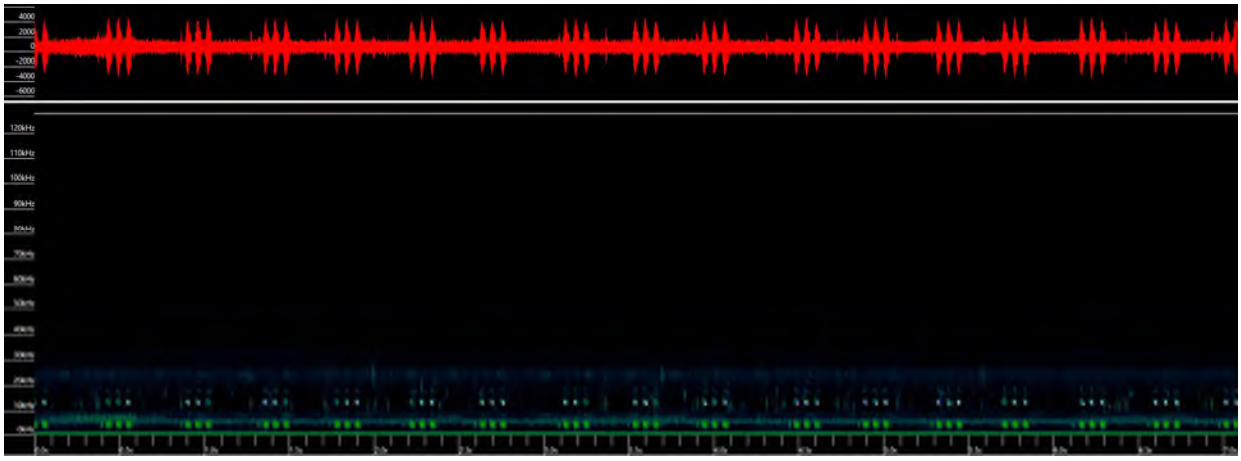
Normal time view

AutoID FBB Call. Detector 7 File ID: SR-70-7-9_20250604_023739.wav
6-4-2025 02:37:39 (EDT)

Example of **Insects** from Detector 7



Compressed view

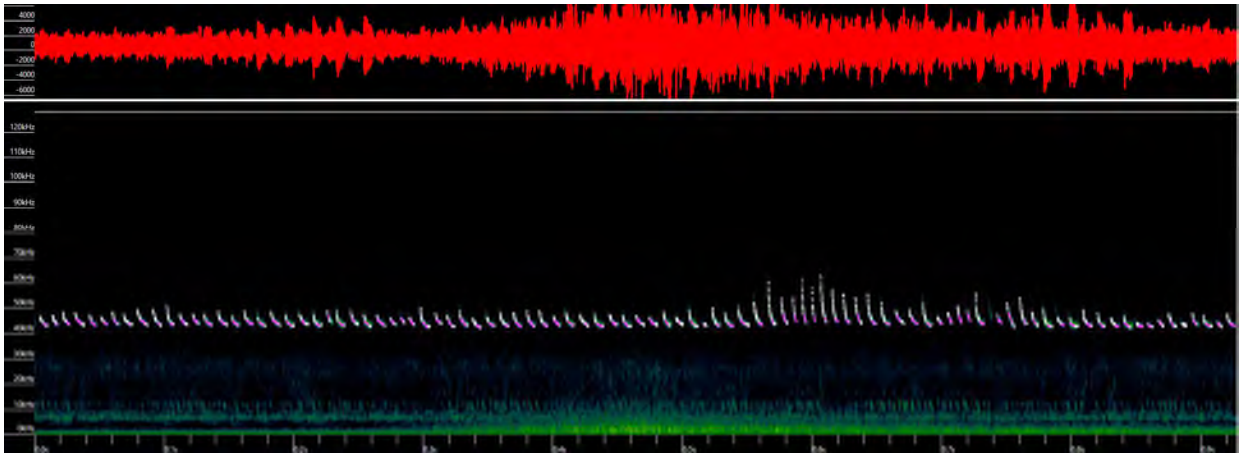


Normal time view

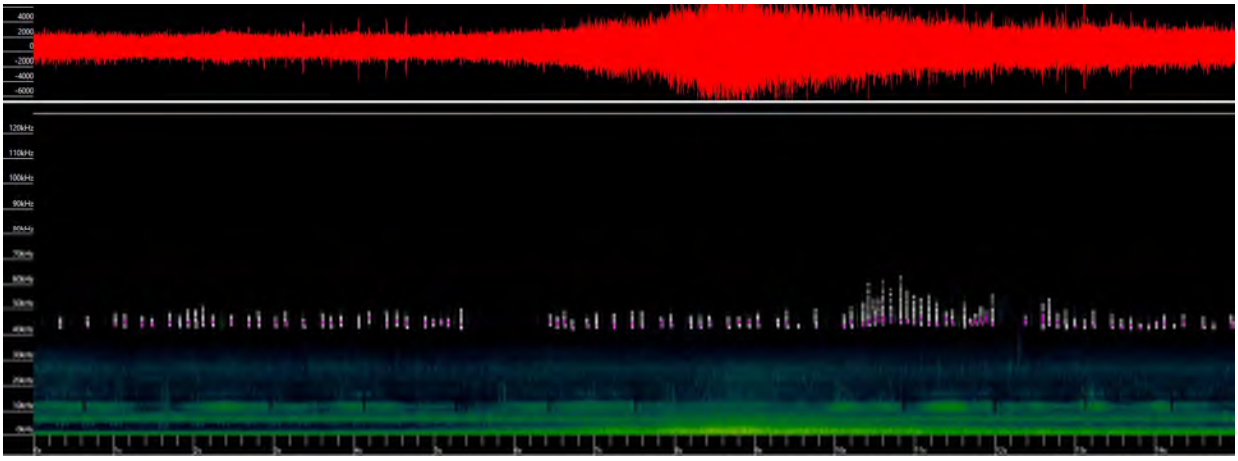
Tricolored Bat Results: Verified Tricolored Bat Call

AutoID TCB Call. Detector 7 File ID: SR-70-7-9_20250612_214357.wav
6-12-2025 21:43:57 (EDT)

Example of **PERSUB** from Detector 7



Compressed view

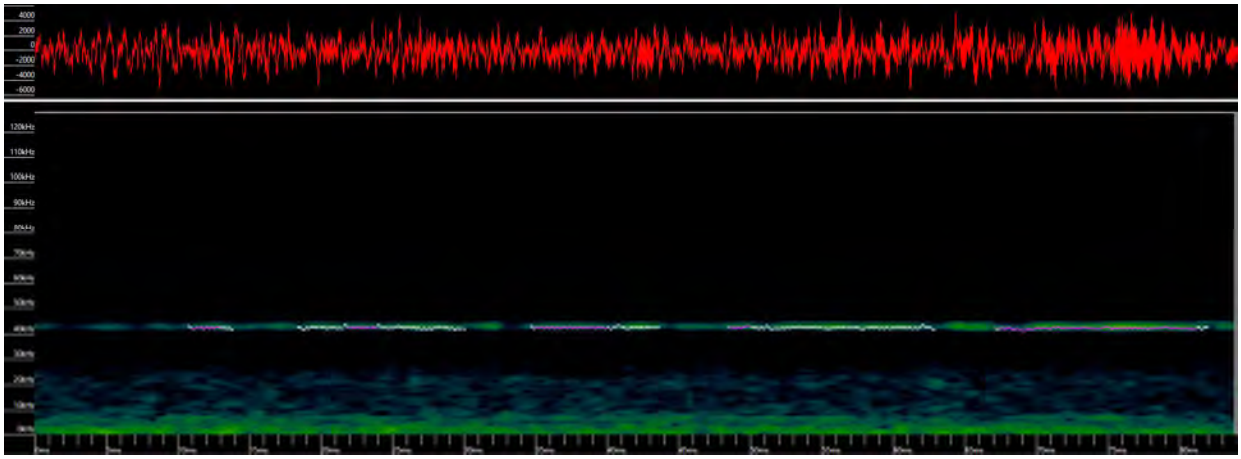


Normal time view

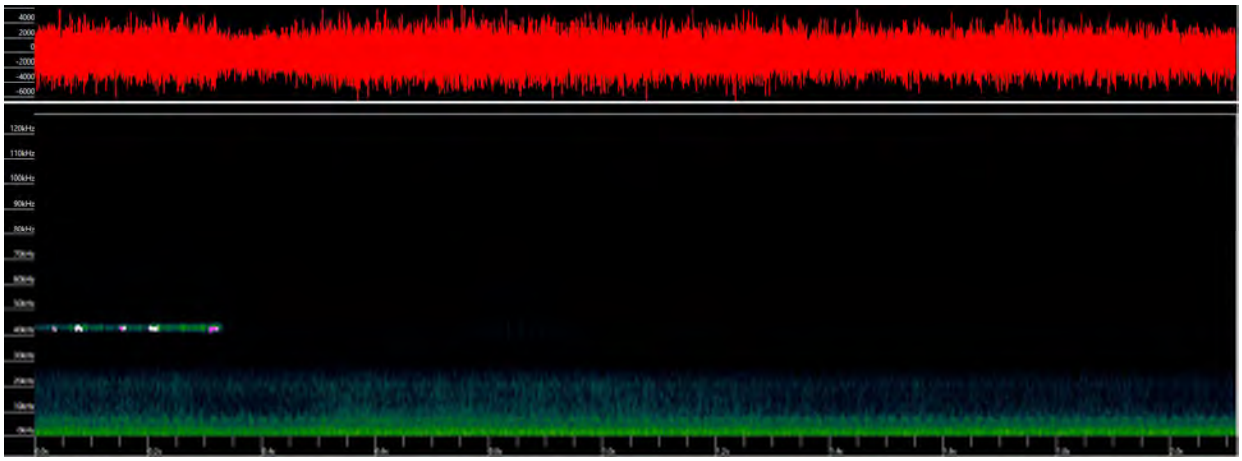
Tricolored Bat Results: Misclassified Tricolored Bat Calls

AutoID TCB Call. Detector 1 File ID: SR-70-1-9_20250605_194819.wav
6-5-2025 19:48:19 (EDT)

Example of **Noise** from Detector 1



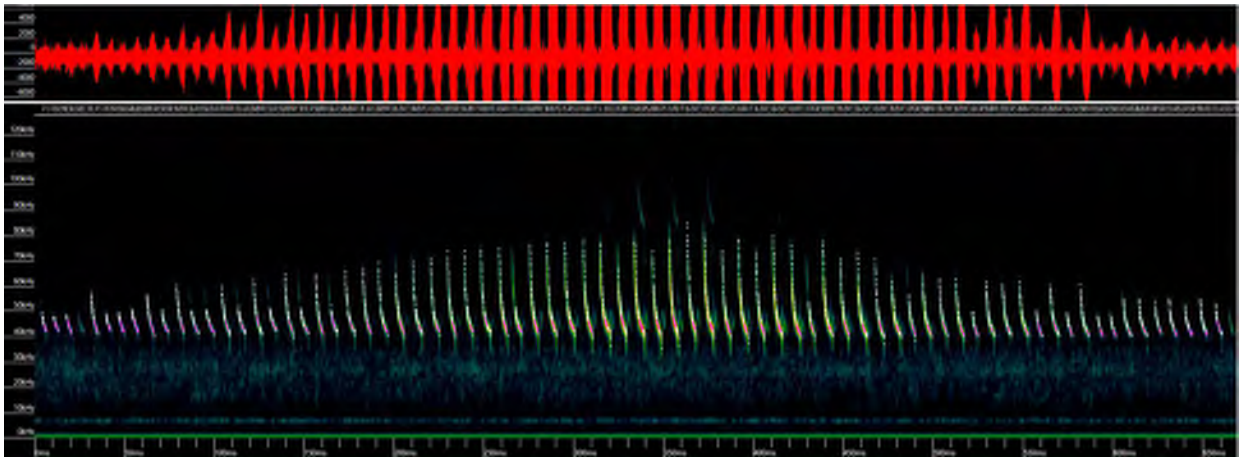
Compressed view



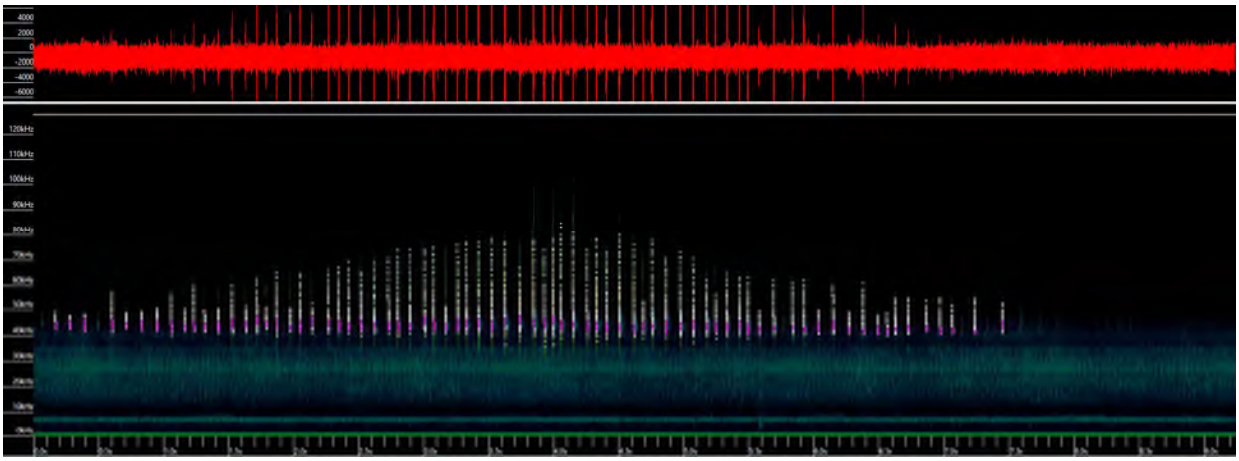
Normal time view

AutoID TCB Call. Detector 2 File ID: SR-70-2-9_20250612_222106.wav
6-12-2025 22:21:06 (EDT)

Example of **Other Species (MYOAUS) within Range** from Detector 2



Compressed view



Normal time view

Florida Bonneted Bat Results: Positively Identified Florida Bonneted Bat Calls

Detector	AutoID	Manual ID	Recording Date	Recording Time	Sunrise	Sunset
7	EUMFLO	EUMFLO	6/2/2025	21:56:49	6:32	20:18
17	EUMFLO	EUMFLO	5/30/2025	21:49:07	6:33	20:16

Appendix G

Florida Bonneted Bat Consultation Key (2019)

Florida Bonneted Bat Consultation Key[#]

Use the following key to evaluate potential effects to the Florida bonneted bat (FBB) from the proposed project. Refer to the Glossary as needed.

1a. Proposed project or land use change is partially or wholly within the Consultation Area (Figure 1)..... **Go to 2**
1b. Proposed project or land use change is wholly outside of the Consultation Area (Figure 1)..... **No Effect**

2a. Potential FBB roosting habitat exists within the project area..... **Go to 3**
2b. No potential FBB roosting habitat exists within the project area..... **Go to 13**

3a. Project size/footprint* ≤ 5 acres (2 hectares)..... **Conduct Limited Roost Survey (Appendix C)** then **Go to 4**
3b. Project size/footprint* > 5 acres (2 hectares)..... **Conduct Full Acoustic/Roost Surveys (Appendix B)** then **Go to 6**

4a. Results show FBB roosting is likely ..... **Go to 5**
4b. Results do not show FBB roosting is likely..... **MANLAA-P if BMPs (Appendix D) used and survey reports are submitted. Programmatic concurrence.**

5a. Project will affect roosting habitat..... **LAA⁺ Further consultation with the Service required.**
5b. Project will not affect roosting habitat..... **MANLAA-C with required BMPs (Appendix D). Further consultation with the Service required.**

6a. Results show some FBB activity..... **Go to 7**
6b. Results show no FBB activity..... **No Effect**

7a. Results show FBB roosting is likely..... **Go to 8**
7b. Results do not show FBB roosting is likely..... **Go to 10**

8a. Project will not affect roosting habitat..... **Go to 9**
8b. Project will affect roosting habitat..... **LAA⁺ Further consultation with the Service required.**

9a. Project will affect* > 50 acres (20 hectares) (wetlands and uplands) of foraging habitat..... **LAA⁺ Further consultation with the Service required.**
9b. Project will affect* ≤ 50 acres (20 hectares) (wetlands and uplands) of foraging habitat..... **MANLAA-C with required BMPs (Appendix D). Further consultation with the Service required.**

10a. Results show high FBB activity/use..... **Go to 11**
10b. Results do not show high FBB activity/use..... **Go to 12**

11a. Project will affect* > 50 acres (20 hectares) (wetlands and uplands) of FBB habitat (roosting and/or foraging)..... **LAA⁺ Further consultation with the Service required.**
11b. Project will affect* ≤ 50 acres (20 hectares) (wetlands and uplands) of FBB habitat (roosting and/or foraging)..... **MANLAA-C with required BMPs (Appendix D). Further consultation with the Service required.**

12a. Project will affect* > 50 acres (20 hectares) (wetlands and uplands) of FBB habitat..... **LAA⁺ Further consultation with the Service required.**
12b. Project will affect* ≤ 50 acres (20 hectares) (wetlands and uplands) of FBB habitat..... **MANLAA-P if BMPs (Appendix D) used and survey reports are submitted. Programmatic concurrence.**

13a. FBB foraging habitat exists within the project area and foraging habitat will be affected…..……..**Go to 14**

13b. FBB foraging habitat exists within the project area and foraging habitat will not be affected **OR** no FBB foraging habitat exists within the project area….……..**No Effect**

14a. Project size* > 50 acres (20 hectares) (wetlands and uplands) ……..…….....**Go to 15**

14b. Project size* ≤ 50 acres (20 hectares) (wetlands and uplands) ……...….. **MANLAA-P if BMPs (Appendix D) used. Programmatic concurrence.**

15a. Project is within 8 miles (12.9 kilometers) of high quality potential roosting areas^……..…..…**Conduct Full Acoustic Survey (Appendix B) and Go to 16**

15b. Project is not within 8 miles (12.9 kilometers) of high quality potential roosting area^…….....….**MANLAA-P if BMPs (Appendix D) used. Programmatic concurrence.**

16a. Results show some FBB activity……....…….…....**Go to 17**

16b. Results show no FBB activity……..…….…....**No Effect**

17a. Results show high FBB activity/use……...…...…....**LAA**[+] **Further consultation with the Service required.**

17b. Results do not show high FBB activity/use…….....…….... **MANLAA-P if BMPs (Appendix D) used and survey reports submitted. Programmatic concurrence.**

[#] If you are within the urban environment and you are renovating an existing artificial structure (with or without additional ground disturbing activities), these Guidelines do not apply. The Service is developing separate guidelines for consultation in these situations. Until the urban guidelines are complete, please contact the Service for additional guidance

*****Includes wetlands and uplands that are going to be altered along with a 250- foot (76.2- meter) buffer around these areas if the parcel is larger than the altered area.

[+]Project modifications could change the **LAA** determinations in numbers 5, 8, 9, 11, 12, and 17 to **MANLAA** determinations.

^Determining if **high quality potential roosting areas** are within 8 mi (12.9 km) of a project is intended to be a desk-top exercise looking at most recent aerial imagery, not a field exercise.

APPENDIX M

Protected Plant Species Specific Species Survey

memorandum

date	October 16, 2025
to	Zakia Williams, USFWS
cc	Matthew Dockins, PE, HNTB Corporation James Fine, HNTB Corporation Shannon Freemon, Environmental Science Associates Tori Kuba, Environmental Science Associates
from	Steven Green, Environmental Science Associates
subject	Listed Plant Species Survey Results Memorandum SR 70 from West of SR 31 to SE Highlands County Line Road FPID 451942-1-22-01 DeSoto County, Florida

Introduction

The Florida Department of Transportation (FDOT) District One is conducting a Project Development and Environment (PD&E) Study, in accordance with the National Environmental Policy Act (NEPA), to evaluate various alternatives for the State Road (SR) 70 roadway improvement project from west of SR 31 to SE Highlands County Line Road located within DeSoto and Highlands Counties, Florida (**Figure 1**). This technical memorandum provides a summary of methodology and findings of a survey for plant species listed under Florida's Regulated Plant Index (5B-40.0055, Florida Administrative Code [F.A.C.]) and the Endangered Species Act (collectively listed species) within the project limits. The project limits, which include the existing and proposed right-of-way (including various alternatives for proposed stormwater management facilities and floodplain compensation sites), are approximately 1,824 acres in size and stretch 17 miles across mostly agricultural lands and existing, maintained right-of-way. Approximately 226 acres of the project limits, primarily outside of the existing right-of-way for SR 70, contain intact natural communities. Although the eastern terminus of the project limits extends into Highlands County, listed species endemic to the Lake Wales Ridge were not identified as target species for this survey. As a result, the survey focuses primarily on listed species with vouchered occurrences in DeSoto County and those vouchered for in neighboring counties with the potential to occur within the project limits based on habitat types present. According to the University of South Florida Library Atlas of Florida Plants (USF Plant Atlas), DeSoto County has 21 vouchered occurrences of listed species with a wide range of habitat requirements. The project limits contain potential habitat for numerous listed species documented in DeSoto County and fall within the known range of additional listed species that have not been documented in DeSoto County.

Preliminary Data Collection

A comprehensive literature and Geographic Information System (GIS) database review was conducted to identify listed species with the potential to occur within the project limits. The literature and database search included queries of the USF Plant Atlas for listed species vouchered in DeSoto County, and listed species vouchered for

neighboring counties (Charlotte, Hardee, Hillsborough and Manatee Counties) with the potential to occur within the project limits. This was done to determine both species known to occur in DeSoto County and identify possible gaps in listed species ranges. Highlands County was not included in this query in order to exclude species endemic to the Lake Wales Ridge from the query results. Review of GIS data sources included the following: Florida Fish and Wildlife Conservation Commission (FWC) Cooperative Land Cover (CLC) spatial data, Natural Resources Conservation Service (NRCS) soil map unit spatial data, 1940s aerial imagery, and current aerial imagery.

Based on review of this data, a list of species with the potential to occur within the project limits was developed. Literature review of the habitat requirements of these listed species including Florida Natural Areas Inventory (FNAI 2025) and Wunderlin (2011) was used in conjunction with the GIS data review to determine the likelihood of occurrence in the project limits based on availability of potential suitable habitat. **Table 1** provides listed species and their likelihoods of occurring within the project limits based on this analysis.

Field Survey Methodology

The field survey methodology was based on Gann et al (2007). The project limits was divided into 342 1/10th of one-mile survey blocks along both the north and south sides of the SR 70 mainline, with larger privately owned parcels within the project limits left undivided (52 parcels). There were 394 survey blocks in total. For reference during the survey, the 1/10th of one-mile survey blocks were labeled according to the mile-marker with mile 0.0 occurring at the western terminus of the project limits. Larger outparcels were labeled according to the DeSoto County Property Appraiser's Parcel ID. The survey blocks were overlaid with the FWC CLC GIS layer to identify areas of intact natural habitat with the potential to harbor listed species identified during preliminary data collection. Survey blocks with CLC are depicted in **Figure 2**.

A systematic survey for listed species was conducted on April 17-18 and April 24-25, 2025. Incidental observations of listed species from May and June 2025 are also included in this memorandum. A supplemental survey of natural areas within Parcel No. 3637270A0503300000 was conducted on August 6, 2025 due to changes in the project limits based on the expansion of one of the floodplain compensation sites to assess additional native that was not surveyed previously. A supplemental survey of natural areas within Parcel Nos. 363725000003600060 and 053826000000100000 was conducted on September 5, 2025 to determine the presence of fall-flowering species identified during the preliminary data collection.

Habitat along the existing SR 70 right-of-way largely consisted of filled, graded or otherwise modified land with a few areas of mowed native vegetation that were relatively undisturbed. Natural communities within the proposed right-of-way were evaluated for habitat quality and the likelihood of encountering listed species. For example, pine flatwoods occluded with saw palmetto and dense shrub cover are not likely to contain habitat (light gaps or other openings) that would harbor the listed species identified during the preliminary data collection and were not thoroughly surveyed. Small areas of intact natural communities and xeric areas identified in the GIS analysis were surveyed on foot by both members of the two-person team. Larger blocks of intact natural communities were systematically surveyed along predetermined pedestrian transects. Seventy-seven of the 392 survey blocks contained natural communities identified in the CLC GIS layer. The frequency and total acreage of each CLC land use type within the project limits are provided in **Table 2**. Representative photographs of natural communities are included in **Appendix A.**

TABLE 1

POTENTIAL FOR PROTECTED FLORAL SPECIES INVOLVEMENT

Scientific Name	Common Name	State Status	Federal Status	Habitat	Probability of Occurrence	Effect Determination
*Bonamia grandiflora**	Florida Bonamia	E	T	Scrub, Sandhill	Not Likely	No Effect
*Calopogon multiflorus**	Manyflowered Grasspink	T	--	Dry Prairie, Mesic Pine Flatwoods	Potential	No Adverse Effect Anticipated
Chionanthus pygmaeus	Pygmy Fringetree	E	E	Scrub	Not Likely	No Effect
Dendrophylax porrectus	Needleroot Airplant Orchid; Threadroot Orchid	T	--	Swamps, Hammocks	Potential	No Adverse Effect Anticipated
Glandularia tampensis	Tampa Mock Vervain	E	--	Hammocks	Potential	No Adverse Effect Anticipated
Hypericum edisonianum	Arcadian St.John's-Wort; Edison's St.John's-Wort; Edison Ascyrum	E	--	Marshes, Wet Prairies, Wet Flatwoods	Likely	No Adverse Effect Anticipated
*Lechea cernua**	Nodding Pinweed	T	--	Scrub, Scrubby Flatwoods	Not Likely	No Effect Anticipated
Lilium catesbaei	Catesby's Lily; Pine Lily	T	--	Mesic Pine Flatwoods	Potential	No Adverse Effect Anticipated
Lythrum flagellare	Florida Loosestrife; Lowland Loosestrife	E	--	Wet Prairies, Disturbed Wet Areas	Observed	Potential to Adversely Effect
Nymphaea jamesoniana	Jameson's Waterlily; Nightblooming Waterlily	E	--	Ponds, Canals and Sloughs	Potential	No Adverse Effect Anticipated
*Nolina brittoniana**	Britton's Beargrass	E	E	Scrub, Sandhill, Scrubby Flatwoods	Not Likely	No Effect
Opuntia stricta	Erect Pricklypear; Shell-Mound Pricklypear	T	--	Shell Middens, Coastal Hammocks	Not Likely	No Effect Anticipated
Pecluma plumula	Plume Polypody; Plumed Rockcap Fern	E	--	Swamps, Hammocks	Potential	No Adverse Effect Anticipated
Pinguicula lutea	Yellow Butterwort; Yellow-Flowered Butterwort	T	--	Wet Flatwoods, Wet Prairies	Likely	No Adverse Effect Anticipated

Scientific Name	Common Name	State Status	Federal Status	Habitat	Probability of Occurrence	Effect Determination
Platanthera ciliaris	Yellow Fringed Orchid	T	--	Wet Prairies, Wet Flatwoods	Likely	No Adverse Effect Anticipated
Pogonia ophioglossoides	Rose Pogonia; Snakemouth Orchid	T	--	Wet Prairies, Wet Flatwoods	Likely	No Adverse Effect Anticipated
Polystachya concreta	Greater Yellowspike Orchid; Pale-Flowered Polystachya	E	--	Swamps, Hammocks	Not Likely	No Effect Anticipated
Roystonea regia[1]	Florida Royal Palm	E	--	Swamps, Hammocks	Not Likely	No Effect Anticipated
Sacoila lanceolata var. *lanceolata*	Leafless Beaked Ladiestresses; Leafless Beaked Orchid	T	--	Pine Flatwoods, Hammocks, Disturbed Areas	Observed	Potential to Adversely Effect
Spiranthes laciniata	Lacelip Ladiestresses	T	--	Wet Prairies, Swamps	Likely	No Adverse Effect Anticipated
Thelypteris serrata	Toothed Lattice-Vein Fern; Dentate Lattice-Vein Fern	E	--	Swamps	Potential	No Adverse Effect Anticipated
Tillandsia balbisiana	Northern Needleleaf	T	--	Hammocks, Scrub	Observed	Potential to Adversely Effect
Tillandsia fasciculata	Cardinal Airplant; Common Wild Pine; Stiff-Leaved Wild Pine	E	--	Swamps, Hammocks	Observed	No Adverse Effect Anticipated
Tillandsia utriculata	Giant Airplant; Giant Wild Pine	E	--	Swamps, Hammocks	Observed	Potential to Adversely Effect
Zephyranthes simpsonii	Redmargin Zephyrlily; Simpson's Zephyrlily	T	--	Wet Flatwoods, Wet Prairies	Potential	No Adverse Effect Anticipated

*Not vouchered in DeSoto County, but within known range.

[1]Florida royal palm is native to extreme south Florida and has escaped cultivation and naturalized outside of its native range.

TABLE 2

FWC CLC WITHIN THE PROJECT LIMITS

Natural Community	Count	Frequency (n=394)	Total Acres	Percent of Project Limits
Shrub and Brushland[1]	13	3.30%	59.85	3.63%
Mixed Wetland Hardwoods	27	6.85%	45.68	2.77%
Mesic Hammock	1	0.25%	26.45	1.60%
Marshes	23	5.84%	33.50	2.03%
Dry Prairie	8	2.03%	18.10	1.10%
Mesic Flatwoods	2	0.51%	10.98	0.67%
Isolated Freshwater Marsh	9	2.28%	9.50	0.58%
Mixed Scrub-Shrub Wetland	1	0.25%	8.41	0.51%
Mixed Hardwood-Coniferous	10	2.54%	6.27	0.38%
Wet Prairie	11	2.79%	4.68	0.28%
Prairie Mesic Hammock	2	0.51%	2.63	0.16%

[1]Areas identified in the CLC as shrub and brushland were determined to be dry prairie

Notable areas of intact habitat were located in Parcel No. 3637260A05033000000 and adjacent survey blocks 10.0 N to 10.7 N. This area contained a mosaic of mesic hammock, dry prairie, freshwater forested wetlands, and freshwater marshes. The dry prairie habitat was of high quality and was covered along 25 parallel transects, while the remainder of the habitat was surveyed via meandering pedestrian transects. Parcel No. 053826000000100000 (near survey block 6.5 S) contained high quality wet prairie and dry prairie habitat and was surveyed along 14 predetermined transects. Parcel No. 363725000003600060 contained high quality mesic pine flatwoods and was surveyed along nine (9) parallel transects. Survey transects are depicted in **Figure 2**. A large freshwater marsh with Parcel No. 3637270A0503300000 included within the project limits was found to be of poor quality. Effects from drainage throughout the marsh were apparent with encroachment of non-wetland species and invasive species throughout. The central portions of this marsh had a dense cover of Carolina willow (*Salix caroliniana*) and Old-World climbing fern (*Lygodium microphyllum*). The outer margins of the marsh had abundant native vegetation and were surveyed on foot.

Since much of the project limits have been anthropogenically altered, 1940s aerial imagery and NRCS soils data were used to identify portions of the project limits that contain relatively well drained soils or had a historic aerial signature indicative of xeric habitats that would not show up in the CLC GIS layer. These areas have a higher likelihood of harboring listed species endemic to scrub and sandhill habitat. Twenty-eight of the survey blocks were identified as having potential xeric habitat. These survey blocks included areas within the Zolfo fine sand, 0 to 2 percent slopes soil map unit (**Figure 3**) and included Parcel No. 033825000000600000 and Parcel No. 033825000000800000 near survey block 1.8 S, survey blocks 1.6 to 1.7 N and S, and survey blocks 4.9 to 5.1 N and S. This soil map unit has the potential to support sandhill and scrubby flatwoods communities. Potential xeric areas identified using 1940s aerial imagery (**Figure 4**) included Parcel No. 033825010900000020 and Parcel No. 033825010900000030 near survey block 2.1 S, survey blocks 4.9 to 5.2 N and S, 11.9 N to 12.2 N, 12.4 N to 12.5 N, and 13.1 to 13.5 N and S. All these areas were highly altered, though some survey blocks contained scattered remnant xeric vegetation including sand live oak (*Quercus geminata*), myrtle oak (*Quercus myrtifolia*), hairy pinweed (*Lechea mucronata*), and sky-blue lupine (*Lupinus diffusus*).

Areas of actively grazed improved pasture and citrus groves within the project limits were not surveyed intensely due to the low likelihood of listed plant occurrence.

When a listed species was encountered, a point was taken using a sub-meter Trimble GPS, and the number of plants was recorded. For larger populations of more than ten plants, a logarithmic scale was used to estimate the population size (11-100, 101-1,000 and 1001-10,000), and the boundaries of the population were marked.

Results

Twenty-seven of the 342 1/10th of one-mile segments and two (2) of the 52 larger outparcels contained listed plant species (**Figure 5**). Five (5) distinct listed species were mapped along the project limits. Each species and their occurrences within the project limits are described in further detail below. Representative photographs of the observed species are included in **Appendix A**. Although not observed, the remining 20 species included in Table 1 may have the potential to occur within the project limits.

Florida Loosestrife (*Lythrum flagellare*)

Florida loosestrife is a perennial terrestrial herb in the loosestrife family (*Lythraceae*). Stems are usually decumbent and sparsely branched. The leaves are opposite and sessile along the stems, oblong shaped to 13mm long (Flora of North America Editorial Committee 2021). The lavender to purple, five-petaled flowers are axillary and can be solitary or paired (FNAI 2025). Florida loosestrife occurs naturally in wet prairies and marshes (Wunderlin 2011) and is known to occur along wet roadside ditches throughout its range (FNAI 2025). Florida loosestrife is endemic to central and southwest Florida and is listed as endangered under Florida's Regulated Plant Index.

Florida loosestrife was documented in 24 survey blocks at 29 distinct locations within the project limits. This species was concentrated along the western third of the project limits in association with the Joshua Creek drainage from survey block 5.8 and westward. One disjunct population was documented near the Highlands County line in survey block 16.6 N. Florida loosestrife was observed growing in maintained roadside ditches and low areas along the right-of-way. Associated plant taxa included oakleaf fleabane (*Erigeron quercifolius*), manyflower marshpennywort (*Hydrocotyle umbellata*), capeweed (*Phyla nodiflora*), whitetop sedge (*Rhynchospora colorata*), herb of grace (*Bacopa monnieri*), and Florida bellflower (*Campanula floridana*). Though difficult to discern individual plants, most populations were large with upwards of 100 plants estimated per occurrence, and 10,000 to 100,000 plants present within the project limits. Exact impacts to populations of Florida loosestrife will be determined upon identification of the Preferred Alternative, including selection of the stormwater management facilities and floodplain compensation site locations. It is anticipated that the project has the **potential to adversely effect** the Florida loosestrife.

Leafless Beaked Ladiestress (*Sacoila lanceolata* var. *lanceolata*)

Leafless beaked ladiestress is a terrestrial orchid with erect, leafless stems (at anthesis) up to 60cm tall. The flowers are a striking orange-red color, arranged spirally along the upper portions of the stems. Individual flowers have acute, lanceolate petals with a grooved, slightly decurrent lip. Stems and flowers are covered with glandular-capitate hairs. Leaves are elliptical, up to 35 cm long with a non-descript petiole and are absent at anthesis (FNA 2002). Leafless beaked ladiestress occurs throughout the Florida peninsula, West Indies, and central and South

America. In Florida, this species occurs in mesic pine flatwoods, mesic hammocks, and disturbed sites (Wunderlin 2011). Leafless beaked ladiestress is listed as threatened under Florida's Regulated Plant Index.

Leafless beaked ladiestress was documented at 30 distinct locations within eight (8) survey blocks with the highest density observed between survey blocks 8.2 S and 8.5 S, and 8.2 N to 8.3 N and adjacent Parcel No. 343726000000100000. A small population was also documented within survey block 7.6 N. All plants were documented within the maintained right-of-way and were growing in association with bahiagrass (*Paspalum notatum*) as well as some relict native pine flatwoods species including silkgrass (*Pityopsis graminifolia*), shiny blueberry (*Vaccinium myrsinites*), and wiregrass (*Aristida stricta* var. *beyrichiana*). It is estimated that there are between 100-1000 individual plants within the project limits. Exact impacts to populations of leafless beaked ladiestress will be determined upon identification of the Preferred Alternative, including selection of the stormwater management facilities and floodplain compensation site locations. It is anticipated that the project has the **potential to adversely effect** the leafless beaked ladiestress.

Northern Needleleaf (*Tillandsia balbisiana*)

Northern needleleaf is an epiphytic member of the bromeliad family (*Bromeliaceae*) occurring as single plants or in clusters. The leaves emanate from a bulbous base and are many-ranked, reflexed, twisted, or contorted, grayish in color, up to 12 inches long and up to one inch wide. The leaves are distinct from other Tillandsia species in having a conspicuous channel. The leaf sheath is conspicuously rust colored toward the base. The inflorescence occurs along a scape to two feet long with densely overlapping, twisted bracts. The scape often has up to ten lateral branches. The floral bracts are overlapping, erect, green to red, broad and leathery. The showy flowers are violet, and fruits are up to two inches long. Northern needleleaf flowers spring through summer but is identifiable year-round (Flora of North America Editorial Committee 2000). Northern needleleaf occurs in hammocks and scrub throughout south and central Florida from Monroe County north to Orange County (Wunderlin 2011). Northern needleleaf is listed as threatened under Florida's Regulated Plant Index.

Northern needleleaf was documented at 12 locations within the project limits. All of these occurrences were within Parcel No. 3637260A0503300000 (Alico Parcel). Northern needleleaf was observed growing as an epiphyte in live oak (*Quercus virginiana*) throughout the dry prairie within this parcel. Three (3) occurrences were also documented within the mesic hammock within this parcel. It is estimated that there are between 10-100 individual plants within the project limits. Exact impacts to populations of northern needleleaf will be determined upon identification of the Preferred Alternative, including selection of the stormwater management facilities and floodplain compensation site locations. It is anticipated that the project has the **potential to adversely effect** the northern needleleaf.

Cardinal Airplant (*Tillandsia fasciculata*)

Cardinal airplant is an epiphytic member of the bromeliad family occurring as single plants or in clusters. The many-ranked leaves emanate from a non-bulbous base and are erect to spreading, gray to gray-green in color, ten to 20 inches long by one inch wide, broadly elliptic, flat, narrowly triangular, tapering evenly from base to the apex and are stiff and leathery. The leaves are involute with an attenuate apex. The sheath is dark rust colored towards the base. The inflorescence occurs along a scape to 14 inches long. The floral bracts are densely imbricate and are erect to spreading. The inflorescence spike is erect to spreading with up to 15 lateral branches. The showy floral bracts are imbricate, erect, red, red-yellow-green, or green. The flowers are violet, and fruits are up to two inches long. Cardinal airplant flowers spring through summer but is identifiable year-round (Flora of

North America Editorial Committee 2000). Cardinal airplant occurs in hammocks and cypress swamps throughout central and southern Florida from Monroe County north to Volusia County (Wunderlin 2011). Cardinal airplant is listed as endangered under Florida's Regulated Plant Index.

Cardinal airplant was documented at seven (7) locations within the project limits. All of these occurrences were within Parcel No. 3637260A0503300000 (Alico Parcel). Cardinal airplant was observed growing as an epiphyte in live oaks throughout the dry prairie within this parcel. It is estimated that there are between 100-1000 individual plants within the project limits. Exact impacts to populations of cardinal airplant will be determined upon identification of the Preferred Alternative, including selection of the stormwater management facilities and floodplain compensation site locations. However, it is anticipated that the project will have **no adverse effect anticipated** on the cardinal airplant.

Giant Airplant (*Tillandsia utriculata*)

Giant airplant is an epiphytic member of the bromeliad family and occurs as a single plant. The many-ranked leaves emanate from a non-bulbous base and are up to three feet long by two inches wide. The leaves are spreading and recurved, not twisted, gray green, with finely appressed scales. The leaf blades are linear-triangular, leathery, and involute with an attenuate apex. The leaf sheath is pale or slightly rust colored. The inflorescence occurs along a scape to 20 inches long with densely overlapping bracts towards the base of the scape. The flowering spike has up to 40 branches. The floral bracts are widely spaced, erect, green or tinged purple. The tubular flowers are white and fruits are up to two inches. Giant airplant flowers in the summer but is identifiable year-round (Flora of North America Editorial Committee 2000). Giant airplant occurs frequently in hammocks and cypress swamps throughout peninsular Florida from Monroe County north to Putnam County (Wunderlin 2011). It is listed as endangered under Florida's Regulated Plant Index.

Giant airplant was documented at seven (7) locations within the project limits and. Giant airplant was documented within Parcel No. 3637260A0503300000 (Alico Parcel) as an epiphyte in live oaks throughout the dry prairie within this parcel. Giant airplant was also documented growing as an epiphyte in live oaks within the mesic pine flatwoods in Parcel No. 363725000003600060. An additional population was also documented growing in a live oak just outside of Parcel No. 013825000001000000 (outside of project limits). It is estimated that there are between 100-1000 individual plants within the project limits. Exact impacts to populations of giant airplant will be determined upon identification of the Preferred Alternative, including selection of the stormwater management facilities and floodplain compensation site locations. It is anticipated that the project has the **potential to adversely effect** the giant airplant.

Survey Limitations

During the survey, the south side of the project limits from approximately survey block 13.0 S to the eastern terminus of the project limits were highly disturbed due to ongoing or recently completed electrical utility work. Suitable habitat within this portion of the project limits was either grubbed, rutted, covered with auger borehole soil material, or covered by heavy equipment temporary access matting.

Although incidental observations of listed species from May and June 2025 are also included in this memorandum, these observations do not constitute a second survey. The timing of this survey overlapped with the optimal survey season for many listed species identified in the preliminary data collection. However, some species only identifiable following stochastic processes (i.e. fire) may be present within the project limits. Of the

listed species identified in the preliminary data collection, the many-flowered grass-pink (*Calopogon multiflorus*) has suitable habitat within the project limits. Many-flowered grass-pink may occur within the pine flatwoods in Parcel No. 363725000003600060, as well as the dry prairie within Parcel No. 3637260A0503300000, though this species usually only produces flowers in response to fire. As a result, a survey to identify presence of many-flowered grass-pink would only be recommended following a fire or prescribed burn.

References

Chafin, L. G. 2000. Field Guide to the Rare Plants of Florida. Florida Natural Areas Inventory, Tallahassee, Florida.

Flora of North America Editorial Committee. (20021). Flora of North America Volume 10: Magnoliophyta: Proteaceae to Elaeagnaceaea. http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250130019

Flora of North America Editorial Committee. (2002). Flora of North America Volume 26: Liliidae. *Sacoila lanceolata* var. *lanceolata.* http://floranorthamerica.org/Sacoila_lanceolata_var._lanceolata.

Flora of North America Editorial Committee. (2000). Flora of North America Volume 22: Magnoliophyta: Alismatidae, Arecidae, Commelinidae (in part), and Zingiberidae. http://floranorthamerica.org/Volume_22.

Florida Natural Areas Inventory, Field Guide Account for *Lythrum flagellare*. URL https://www.fnai.org/PDFs/FieldGuides/ Lythrum_flagellare.pdf accessed on May 28, 2025.

Gann, G.D., S.E. Green, K.A. Bradley, and A.M. Jenkins. 2007. Mapping of invasive exotic plants and rare native plants on Florida Department of Transportation Right-of-Way in Miami-Dade and Monroe Counties, Florida (District 6). Final Report submitted to the University of Florida and the Florida Department of Transportation District 6 Office, Florida by the Institute for Regional Conservation.

Wunderlin, R.P. and B.F. Hansen. 2011. Guide to the Vascular Plants of Florida, 3rd Edition. University Press of Florida, Gainesville, Florida.

Figures

Figure 1 Project Location
Figure 2 CLC Natural Communities
Figure 3 Zolfo Fine Sand Soil Map Units
Figure 4 1940s Potential Xeric Areas
Figure 5 Listed Species Occurrences

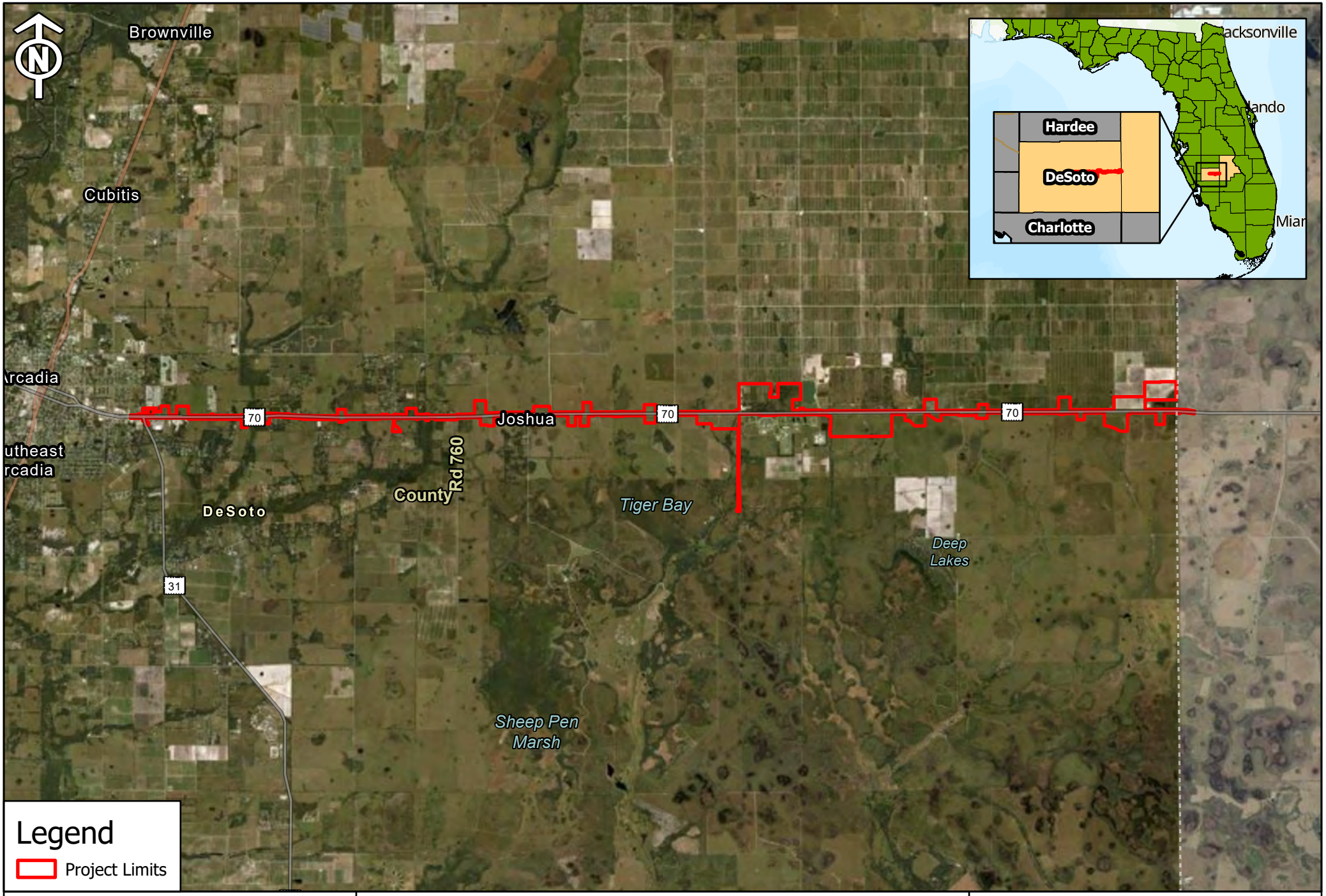


Figure 1 - Project Location

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 1 2 3 4 Miles

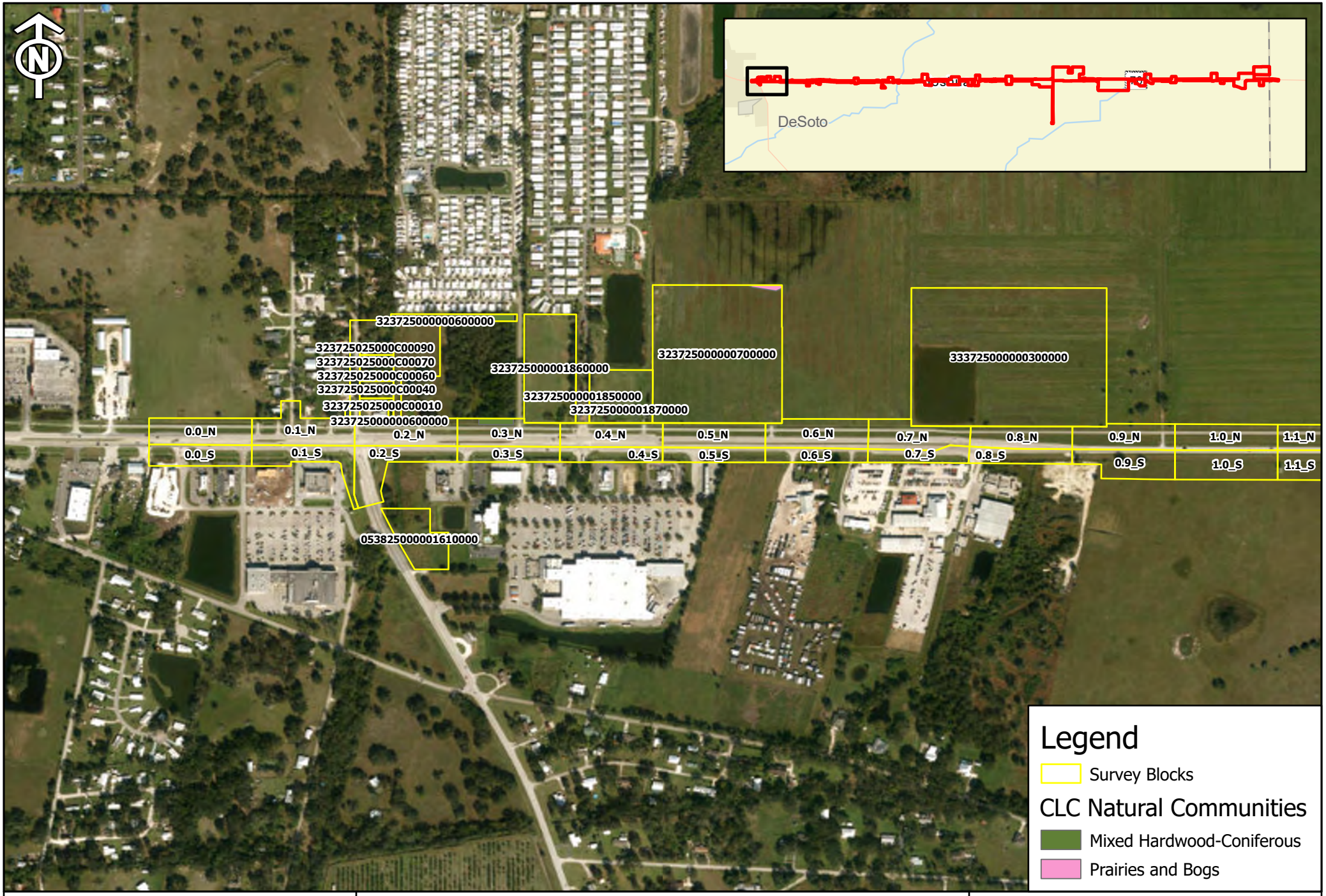


Figure 2-1 - CLC Natural Communities

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DeSoto and Highlands Counties, Florida

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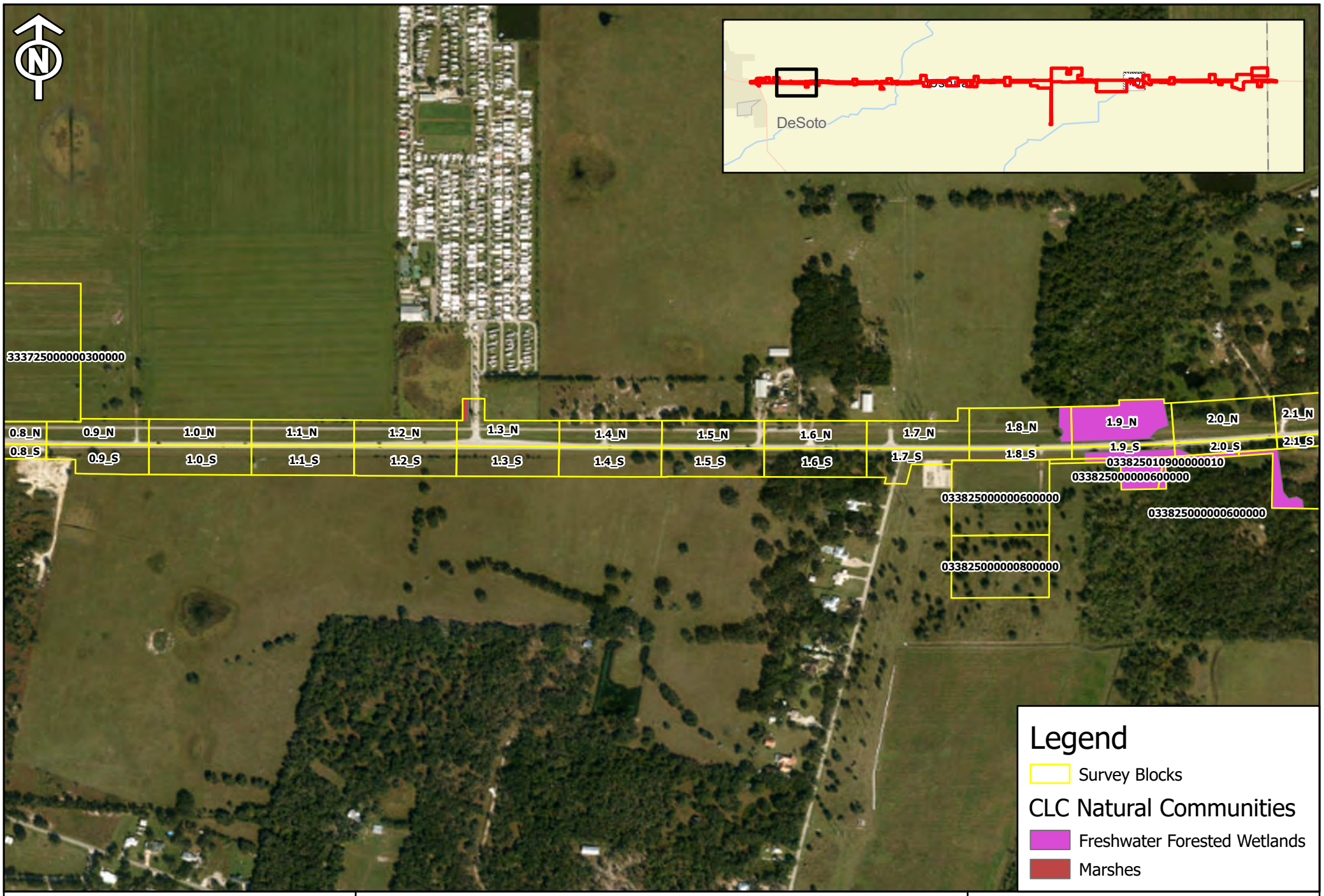

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DeSoto and Highlands Counties, Florida

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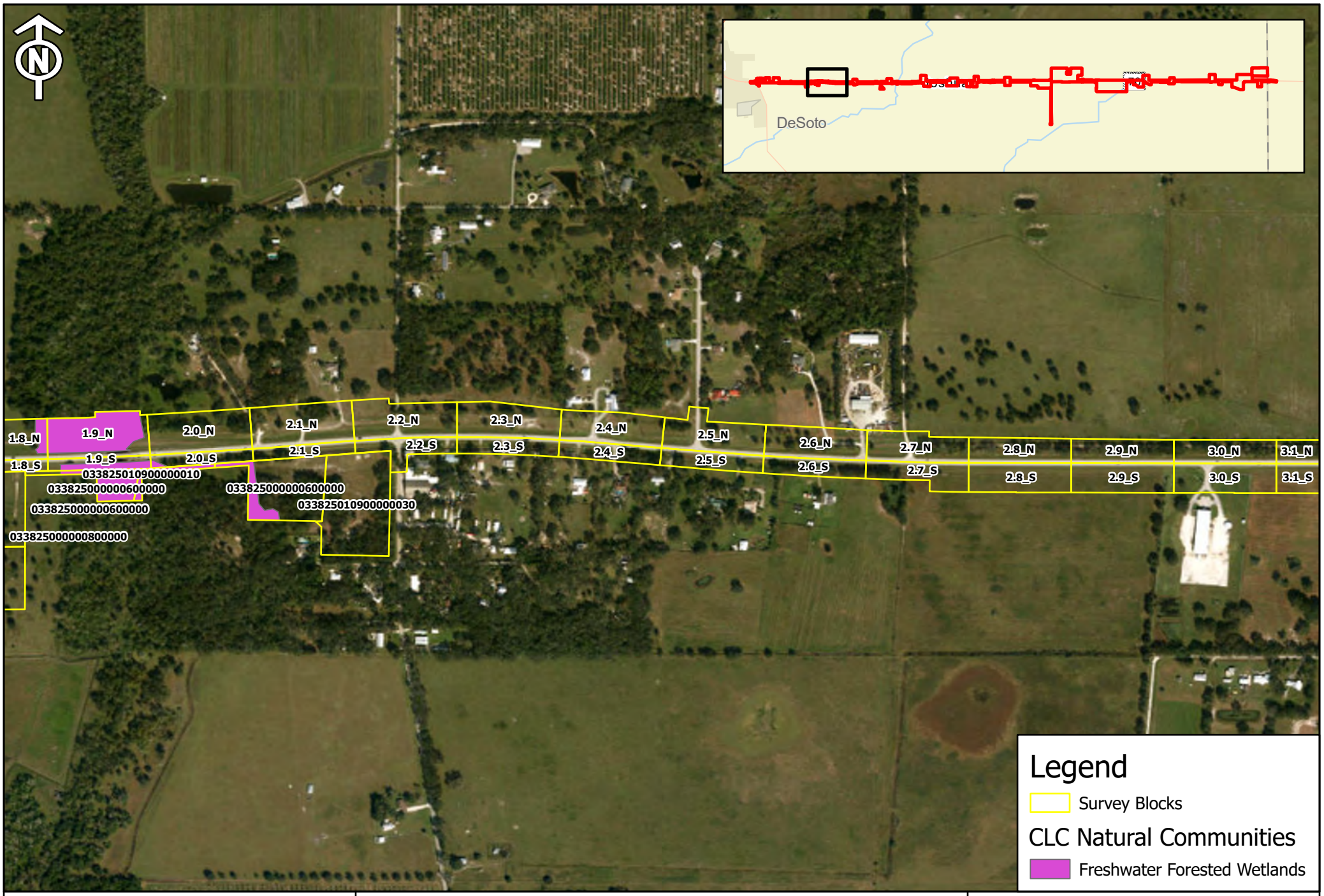

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DeSoto and Highlands Counties, Florida

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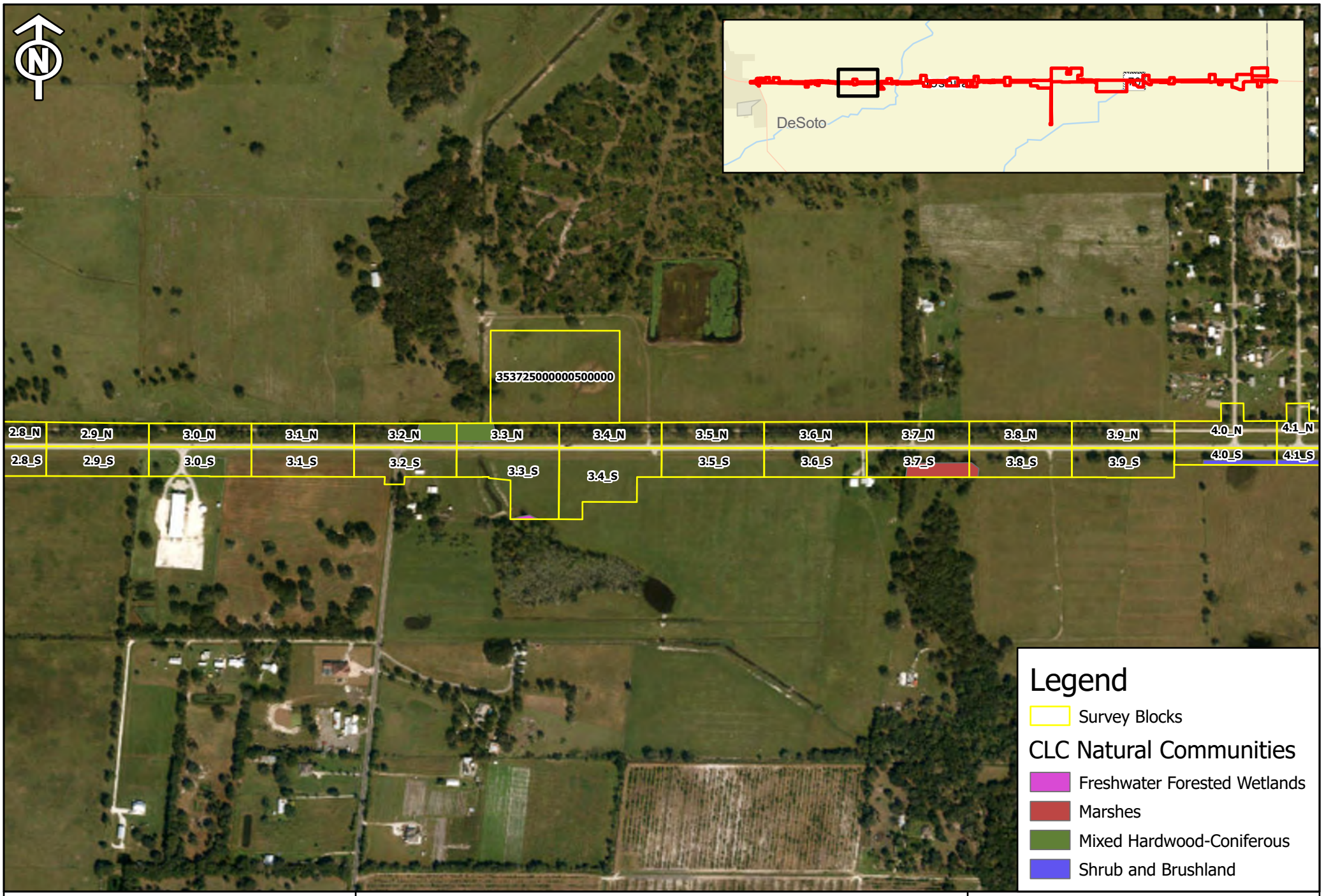

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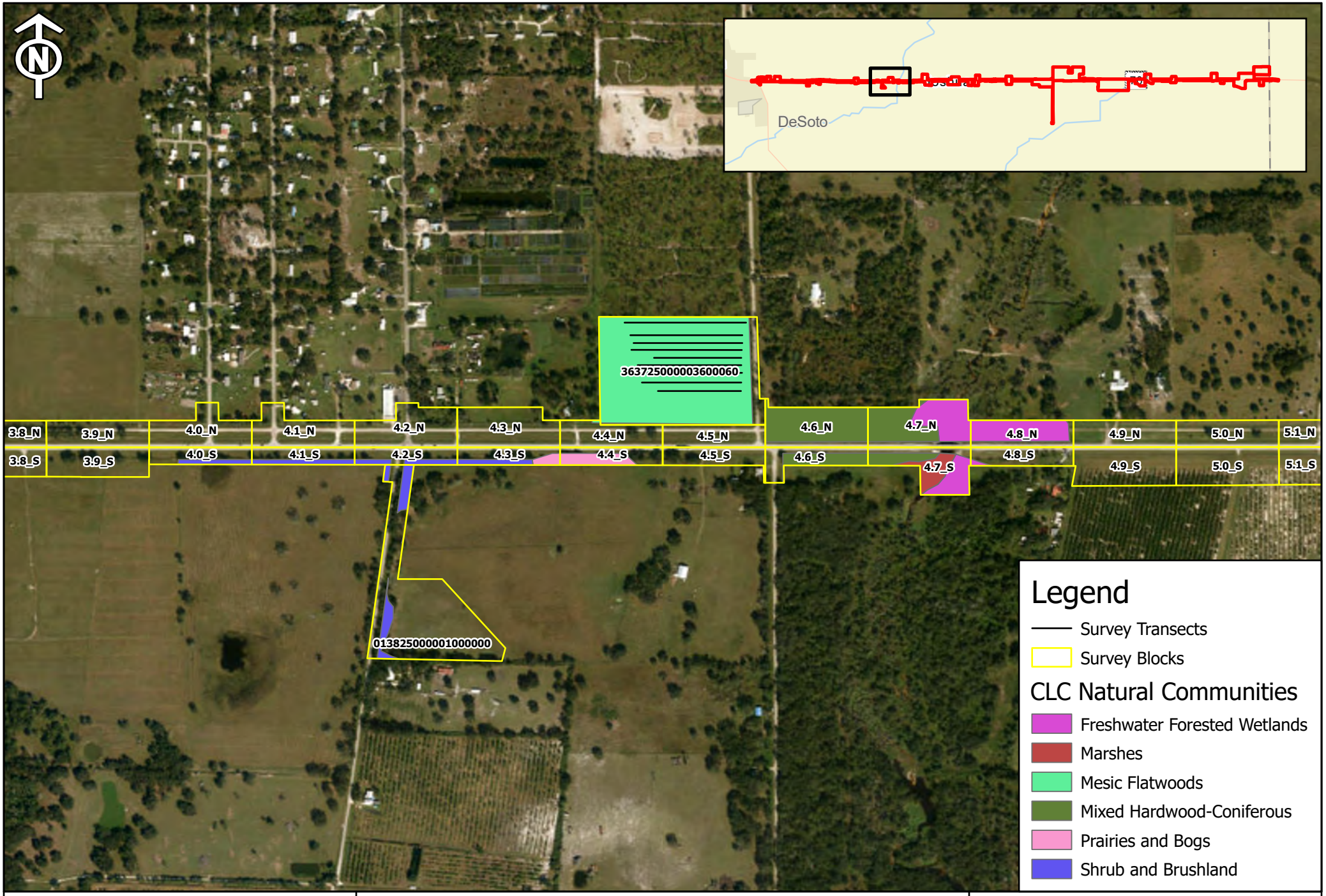

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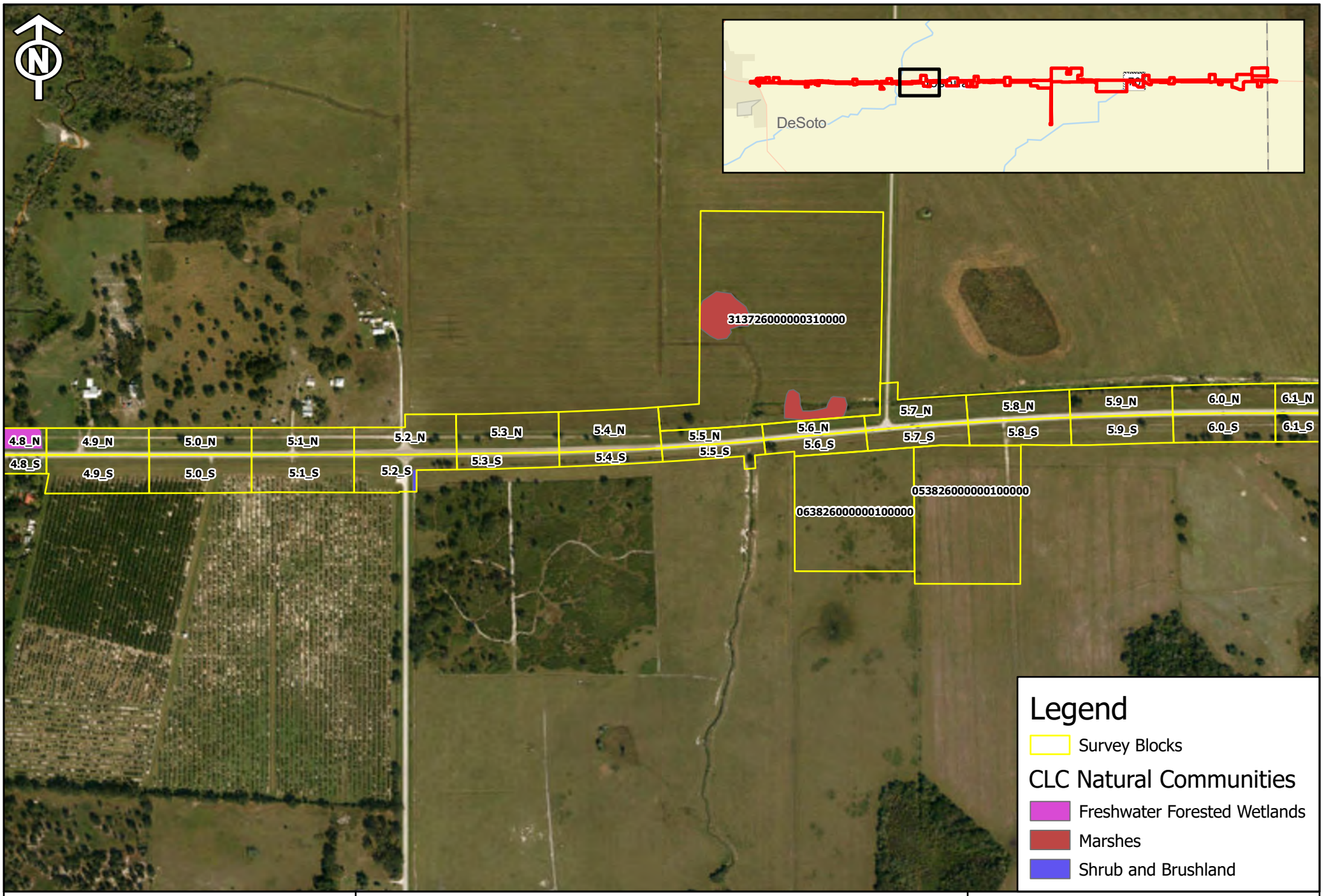

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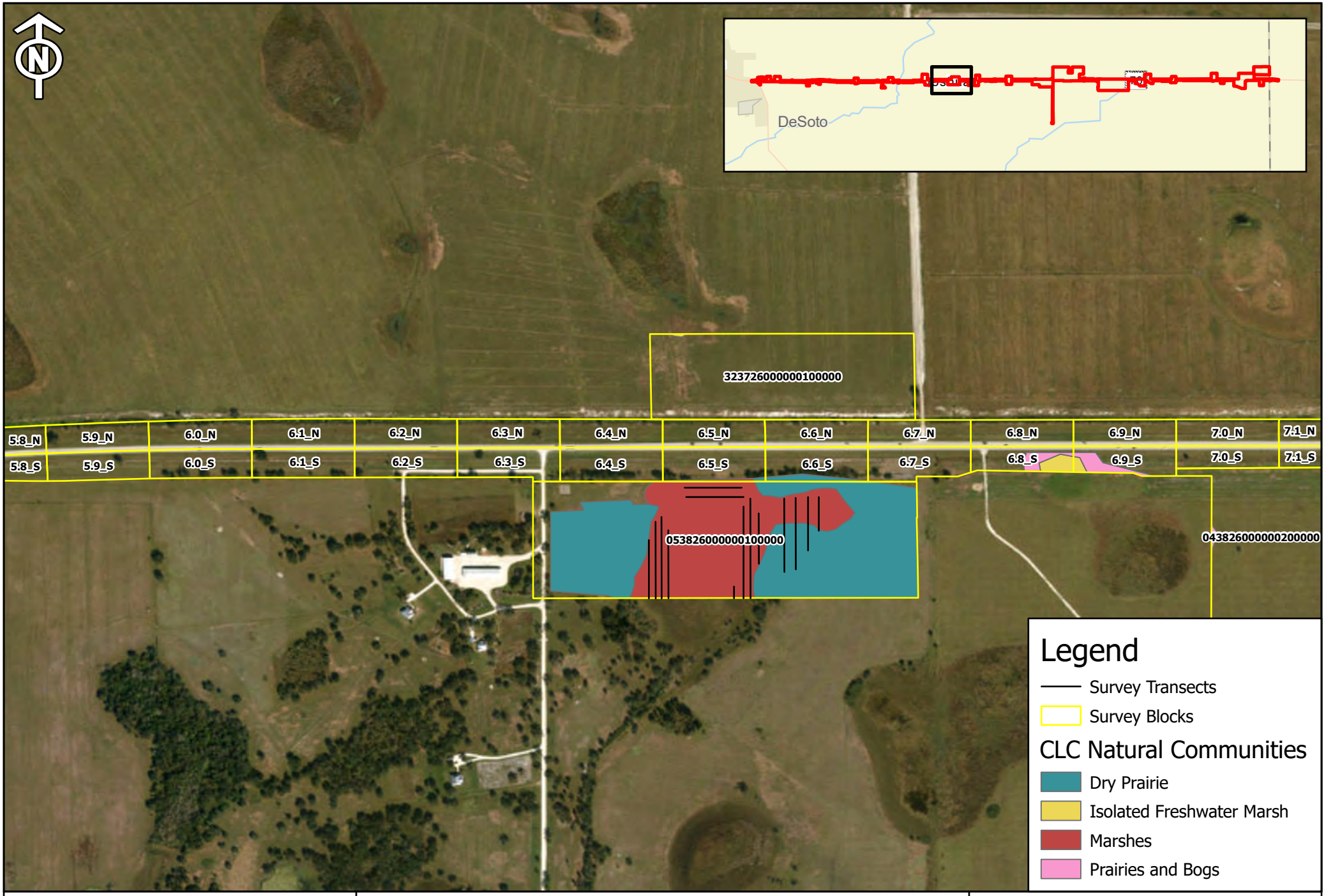

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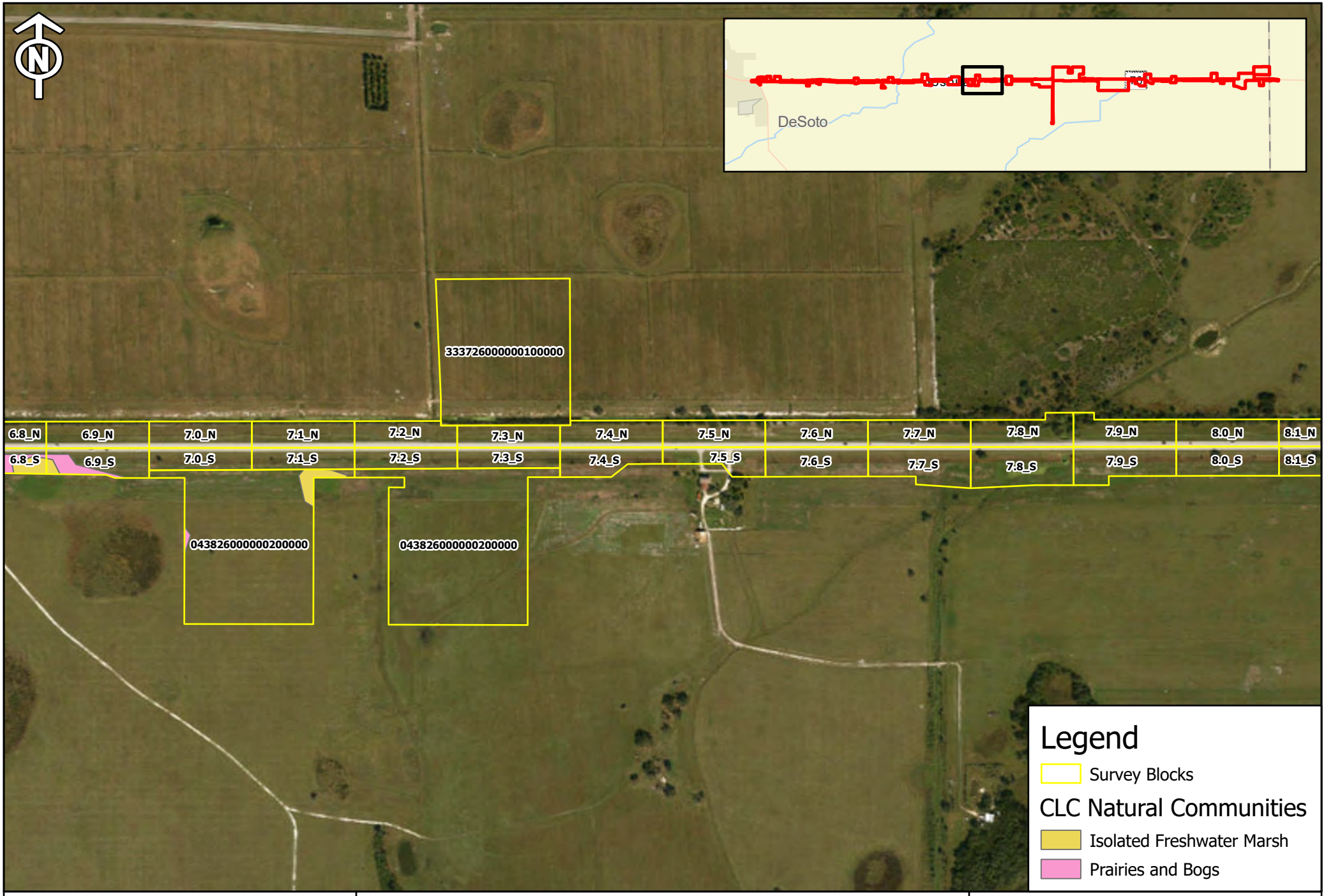

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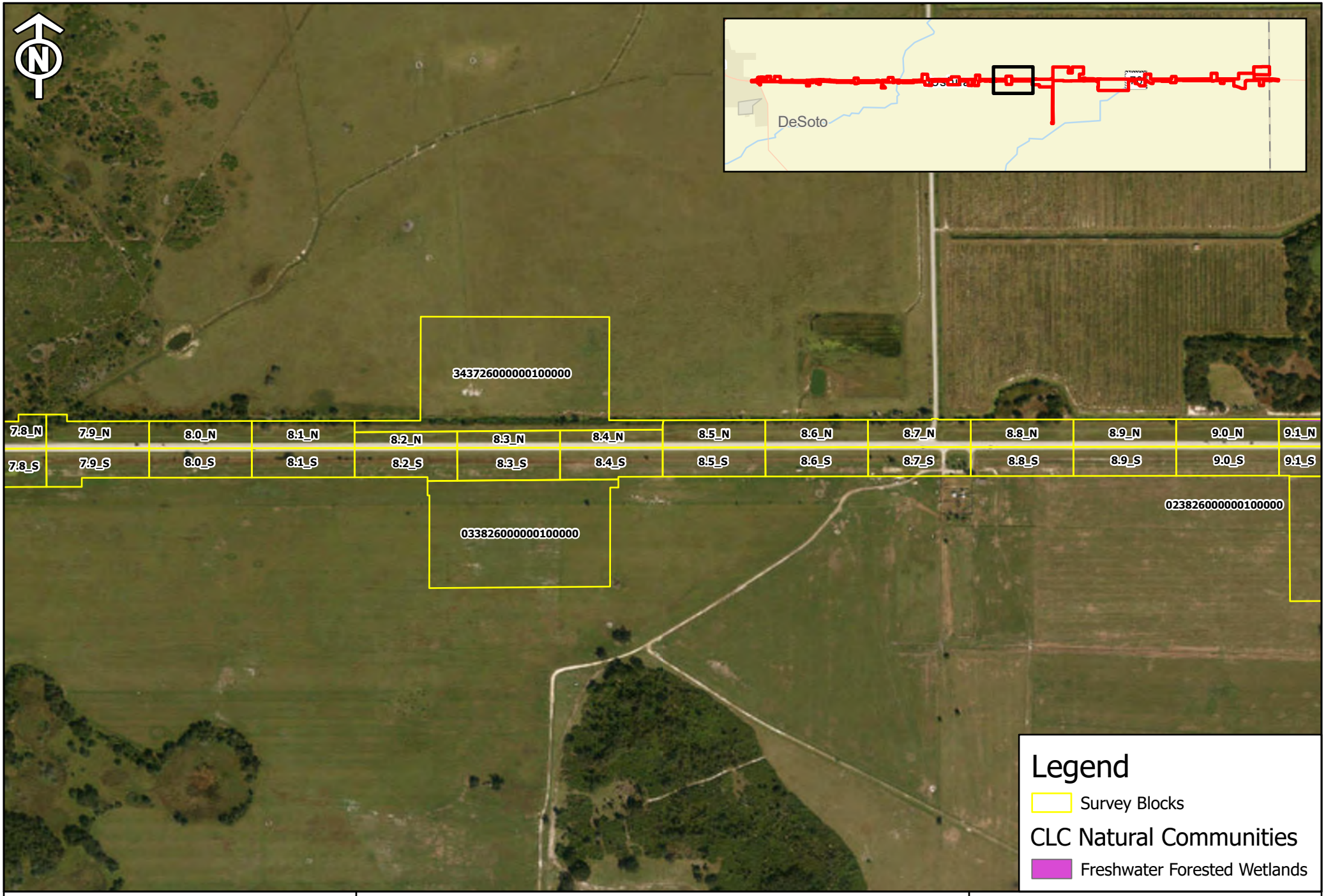

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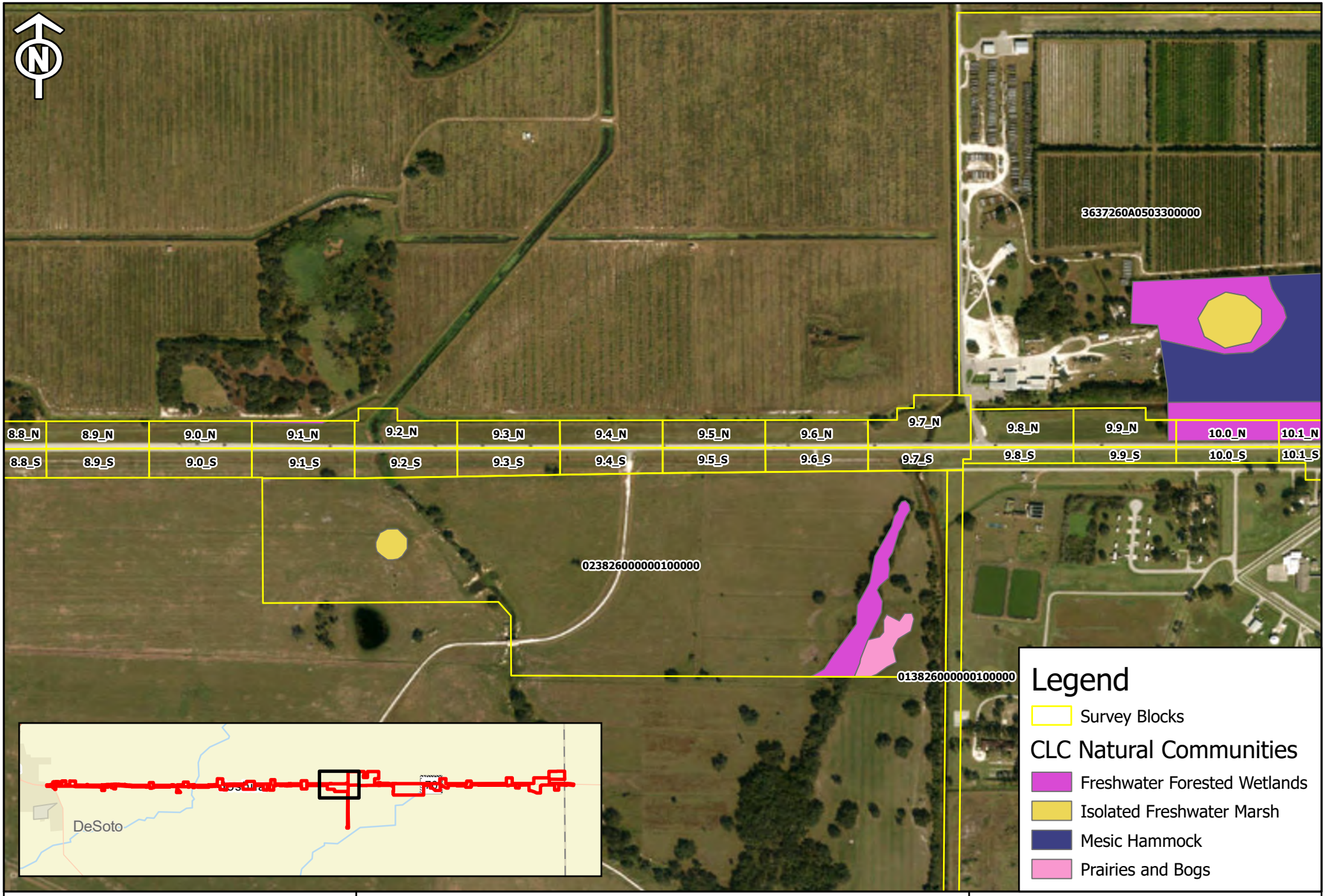

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DeSoto and Highlands Counties, Florida

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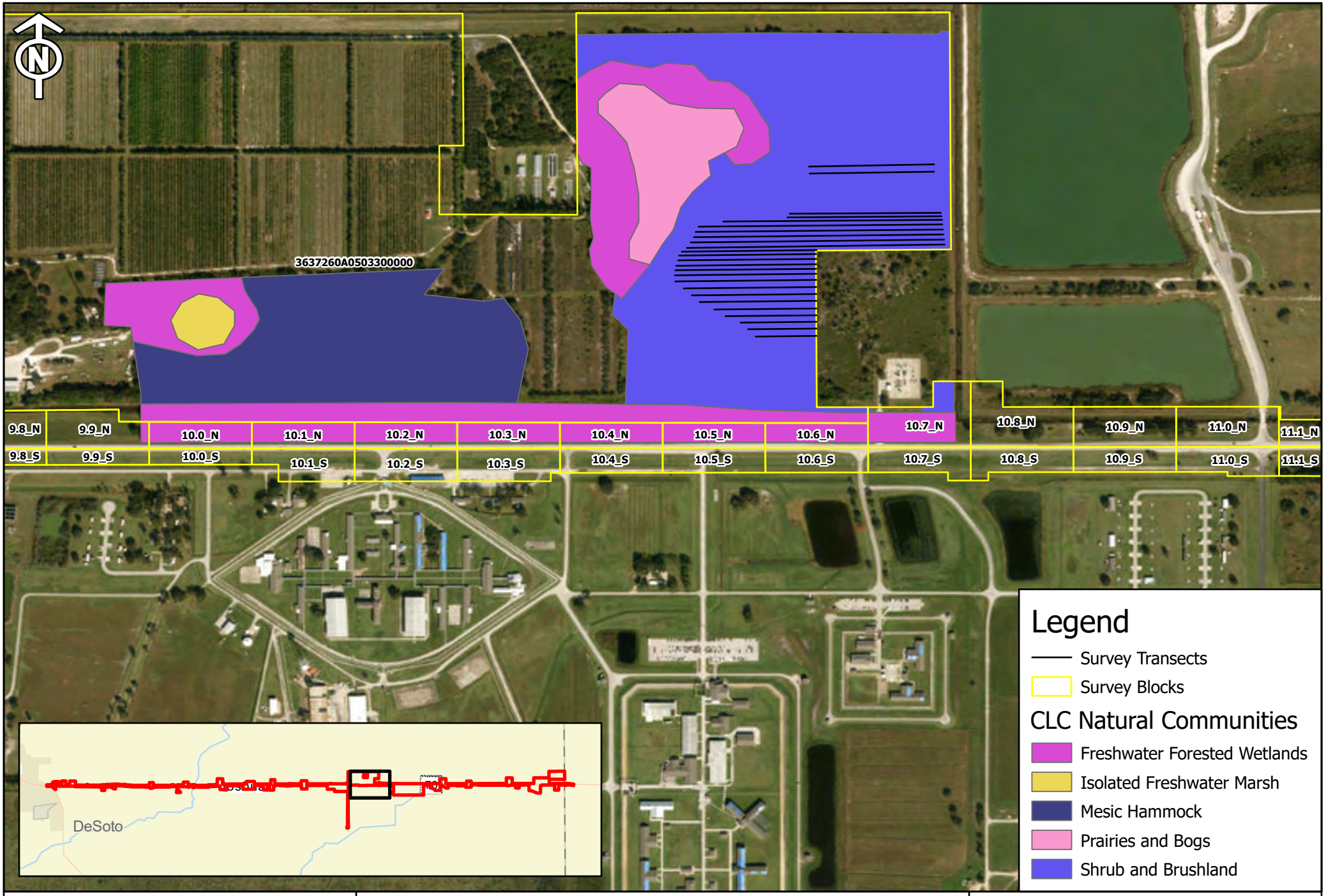

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DeSoto and Highlands Counties, Florida

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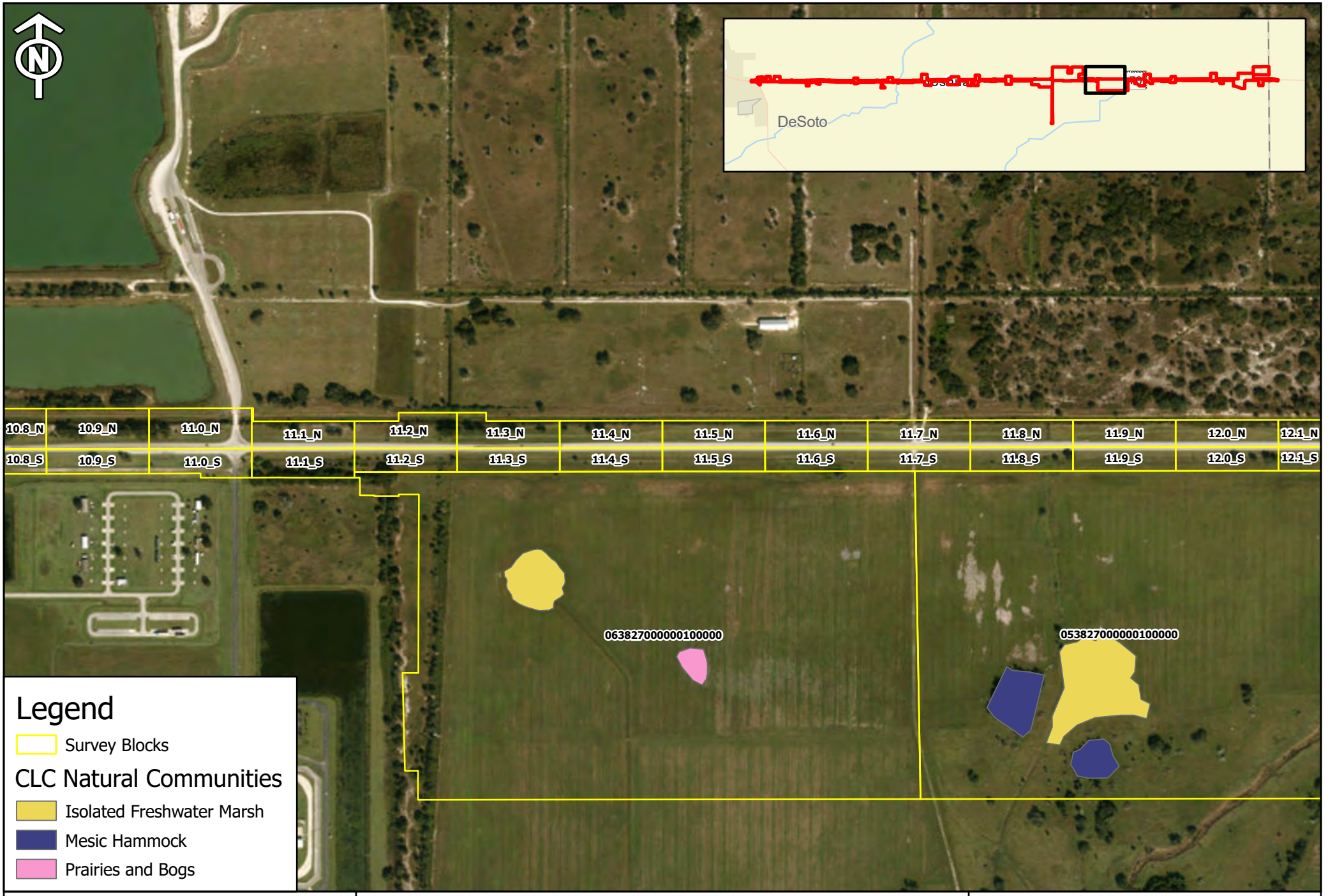

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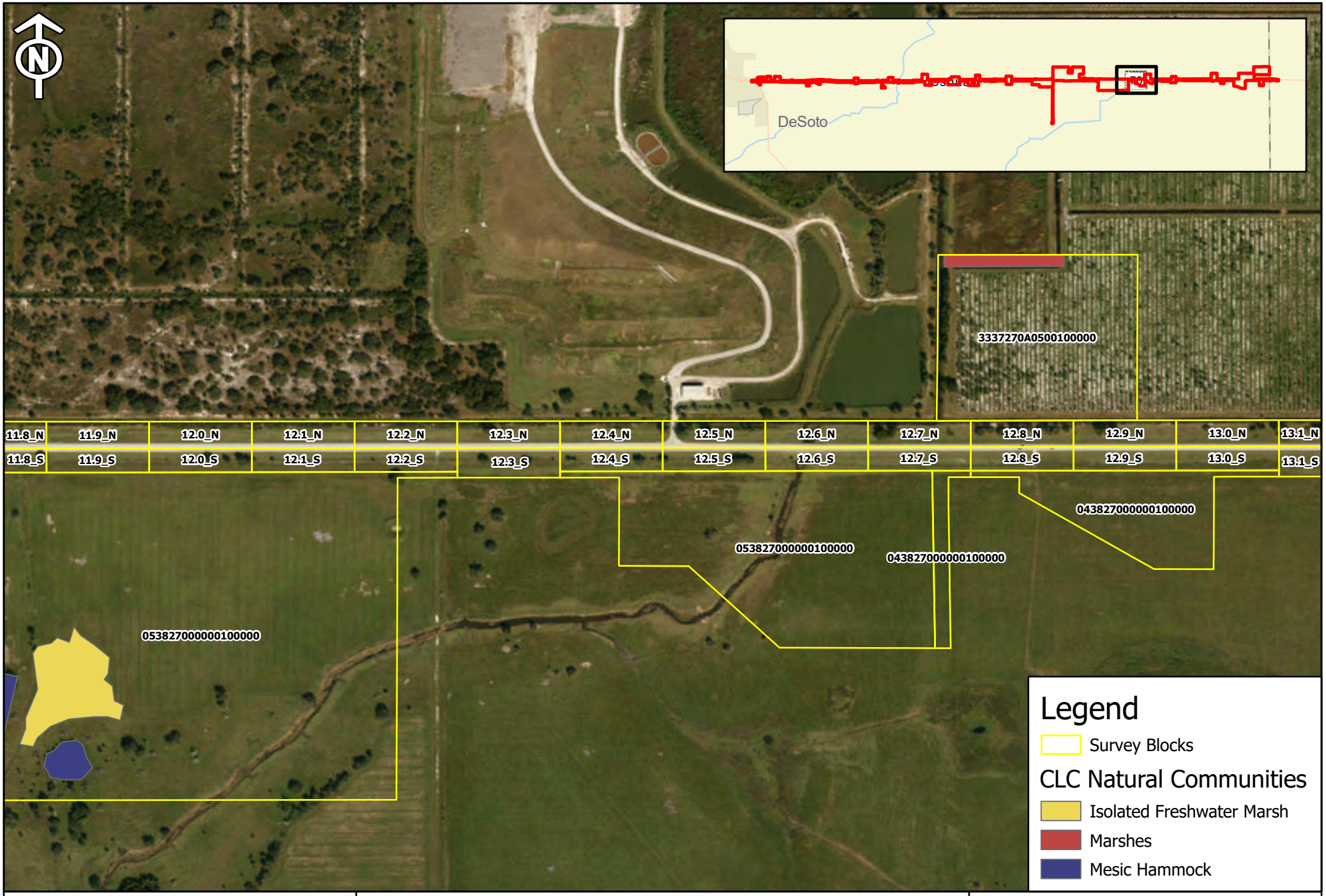

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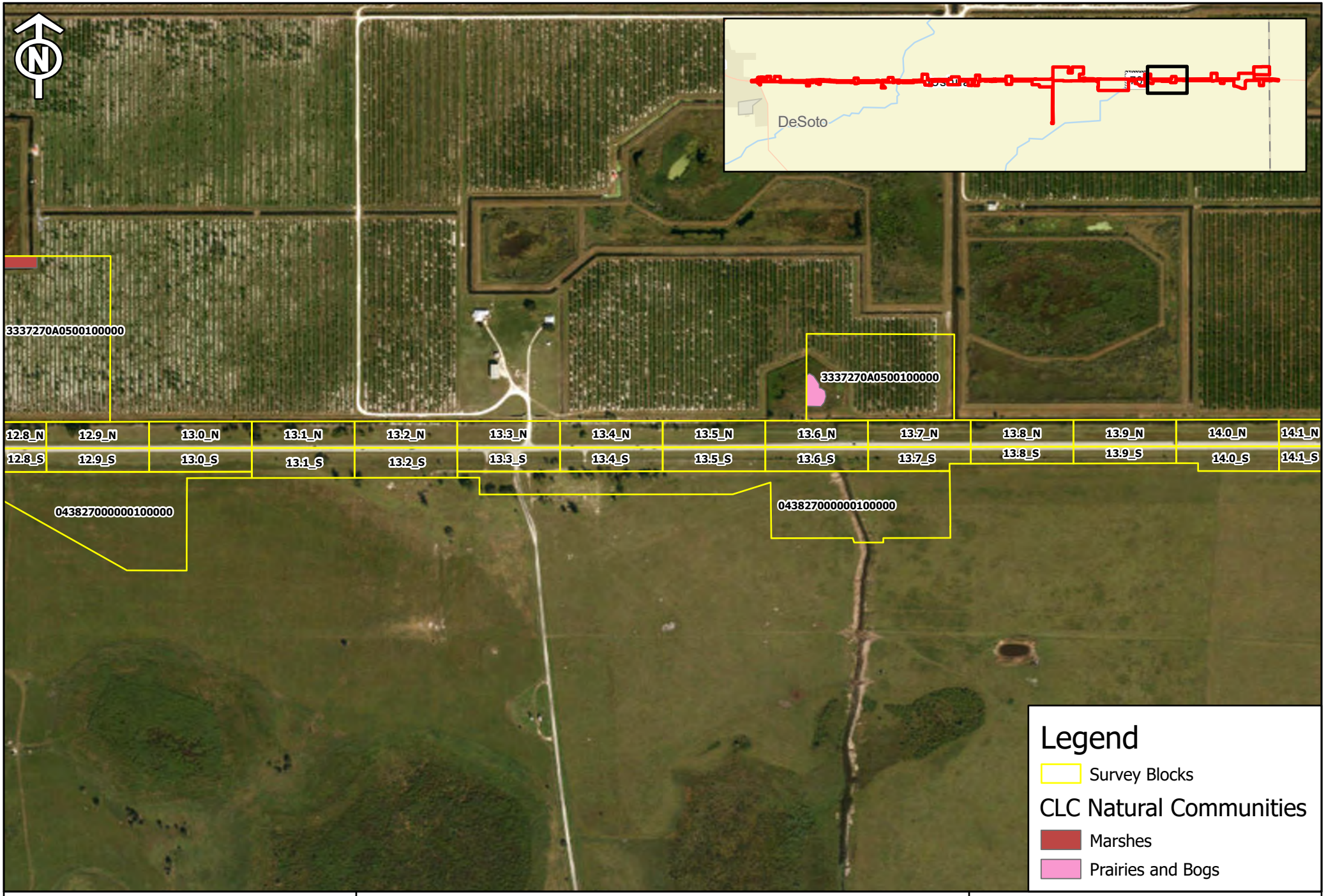

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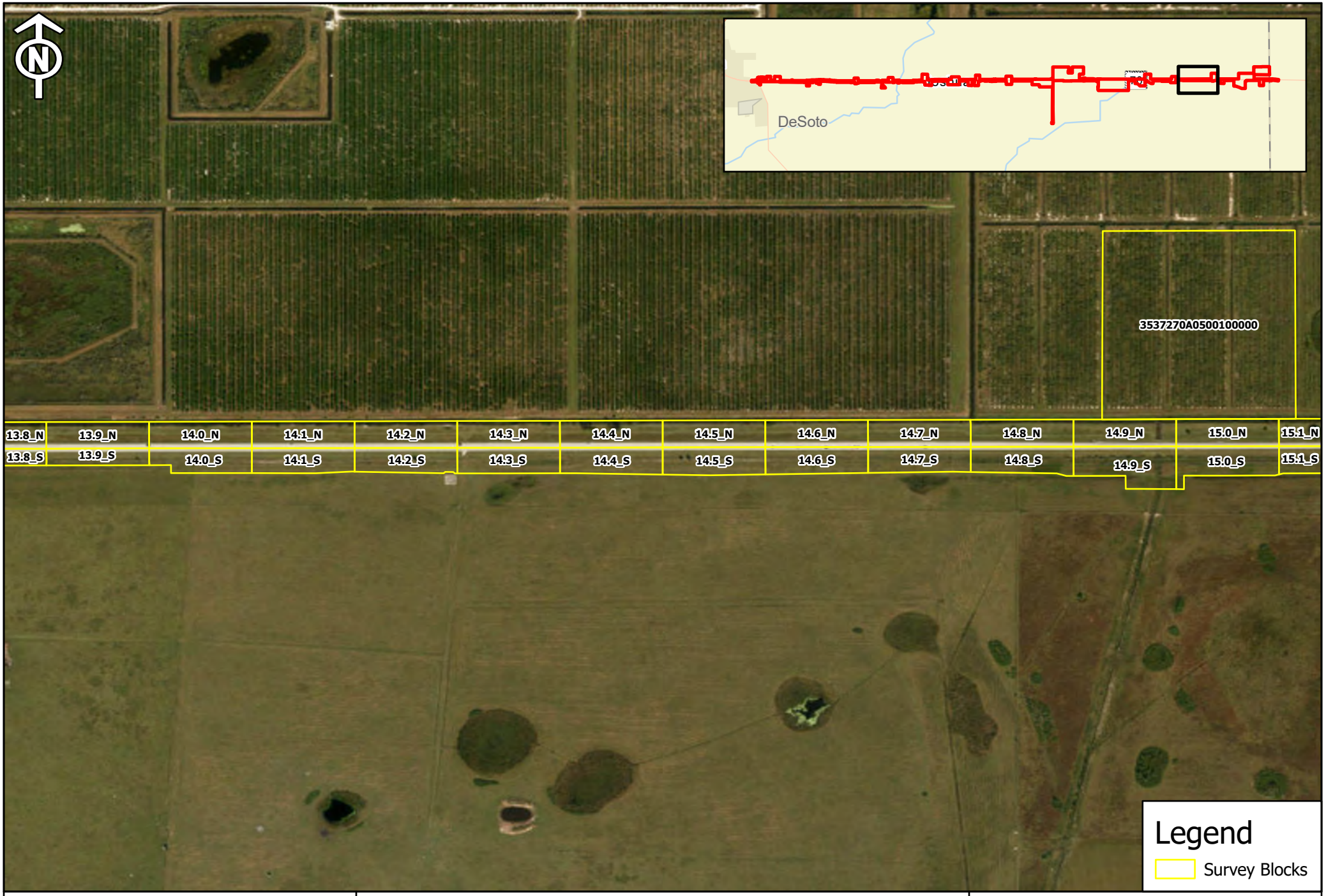

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DeSoto and Highlands Counties, Florida

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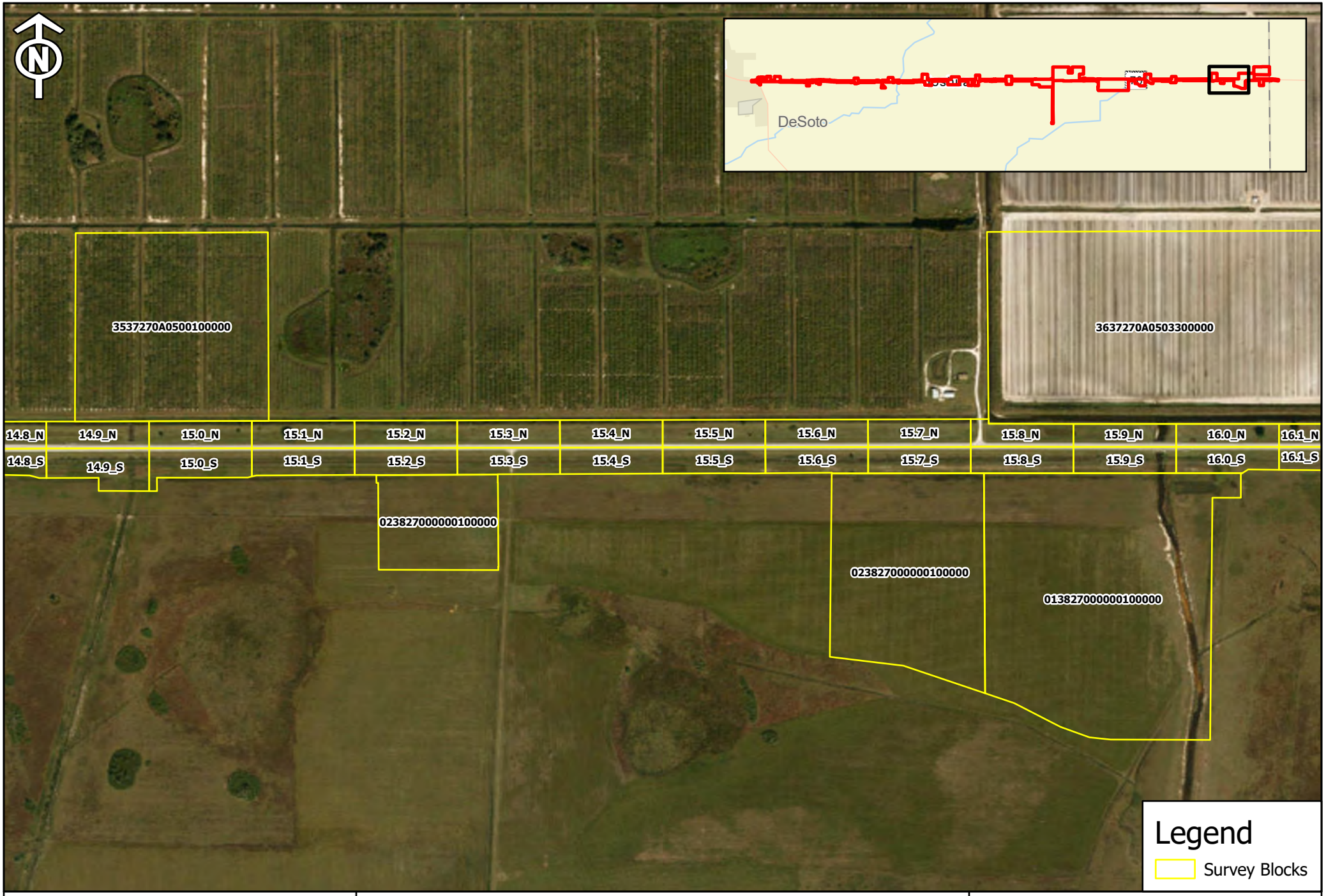

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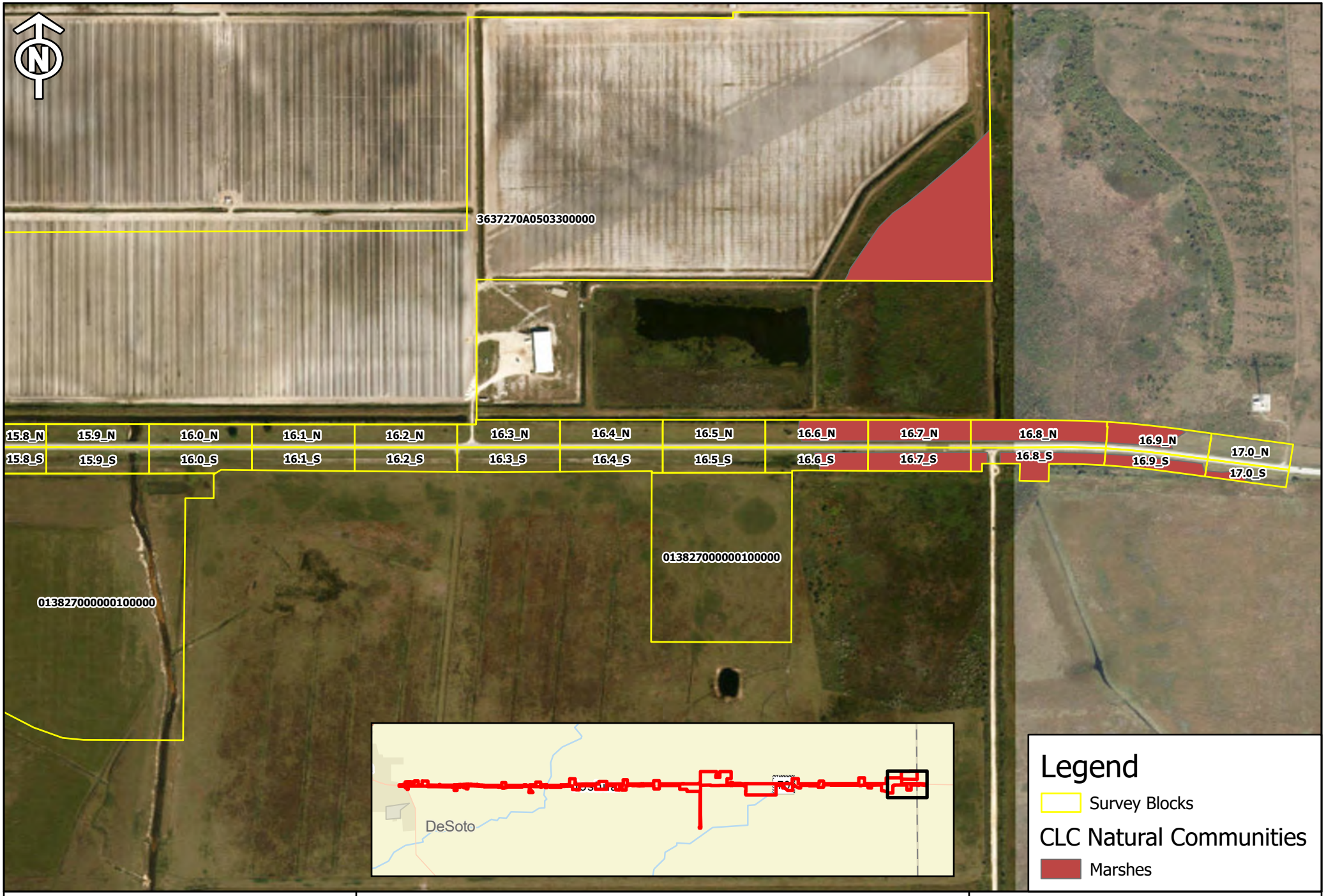

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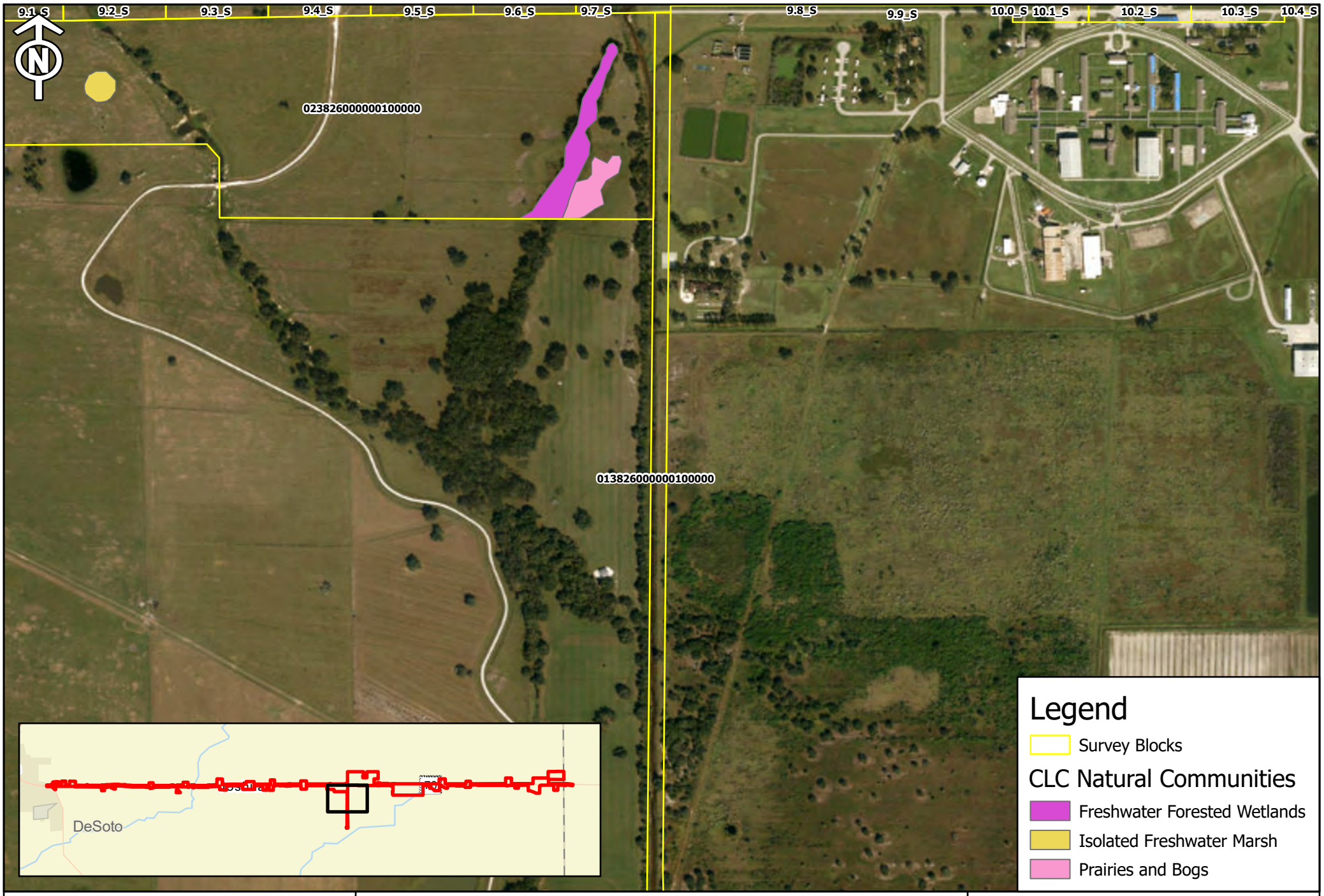

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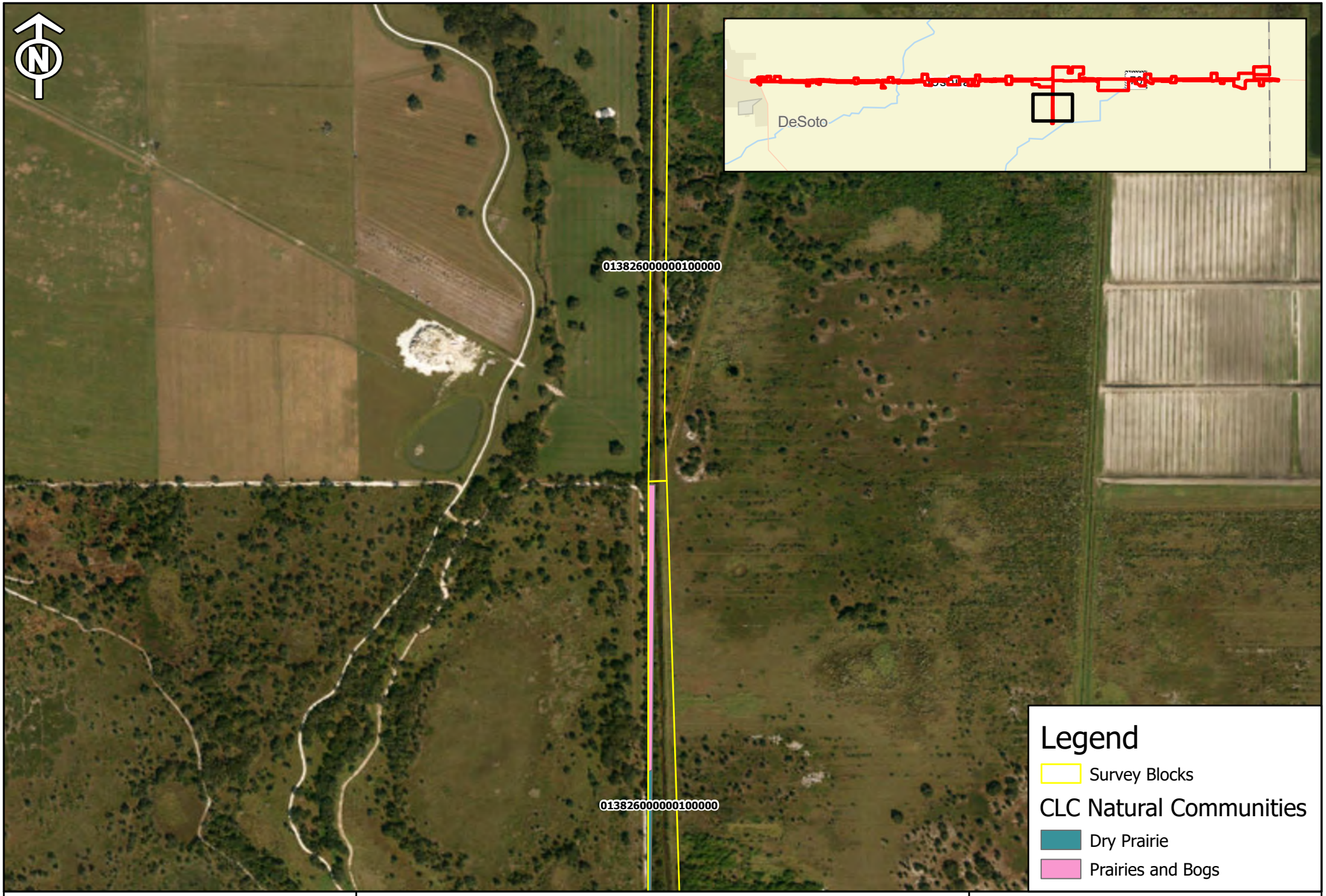

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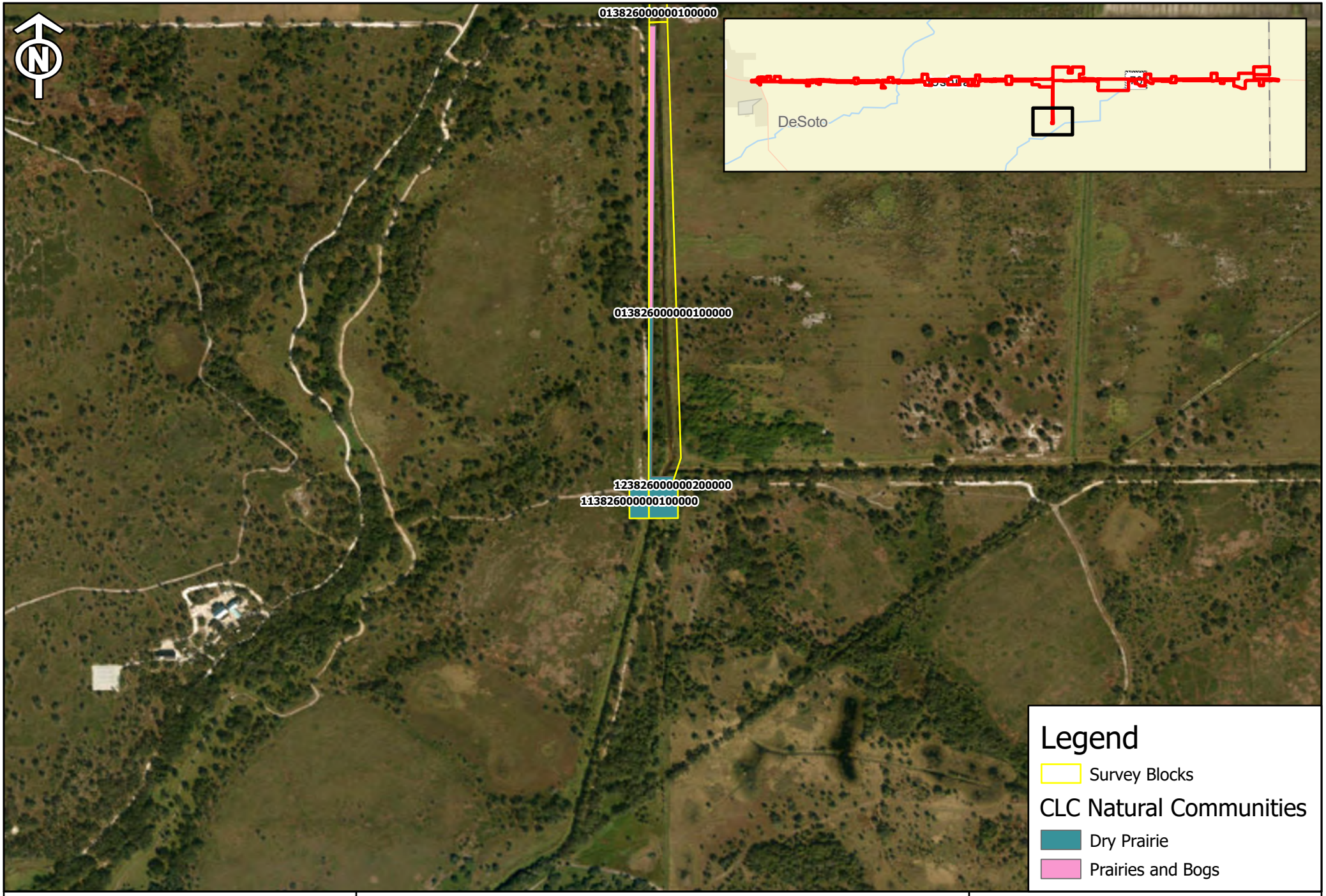

Figure 2-20 - CLC Natural Communities

SR 70 from West of SR 31 to SE Highlands County Line Road
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DeSoto and Highlands Counties, Florida

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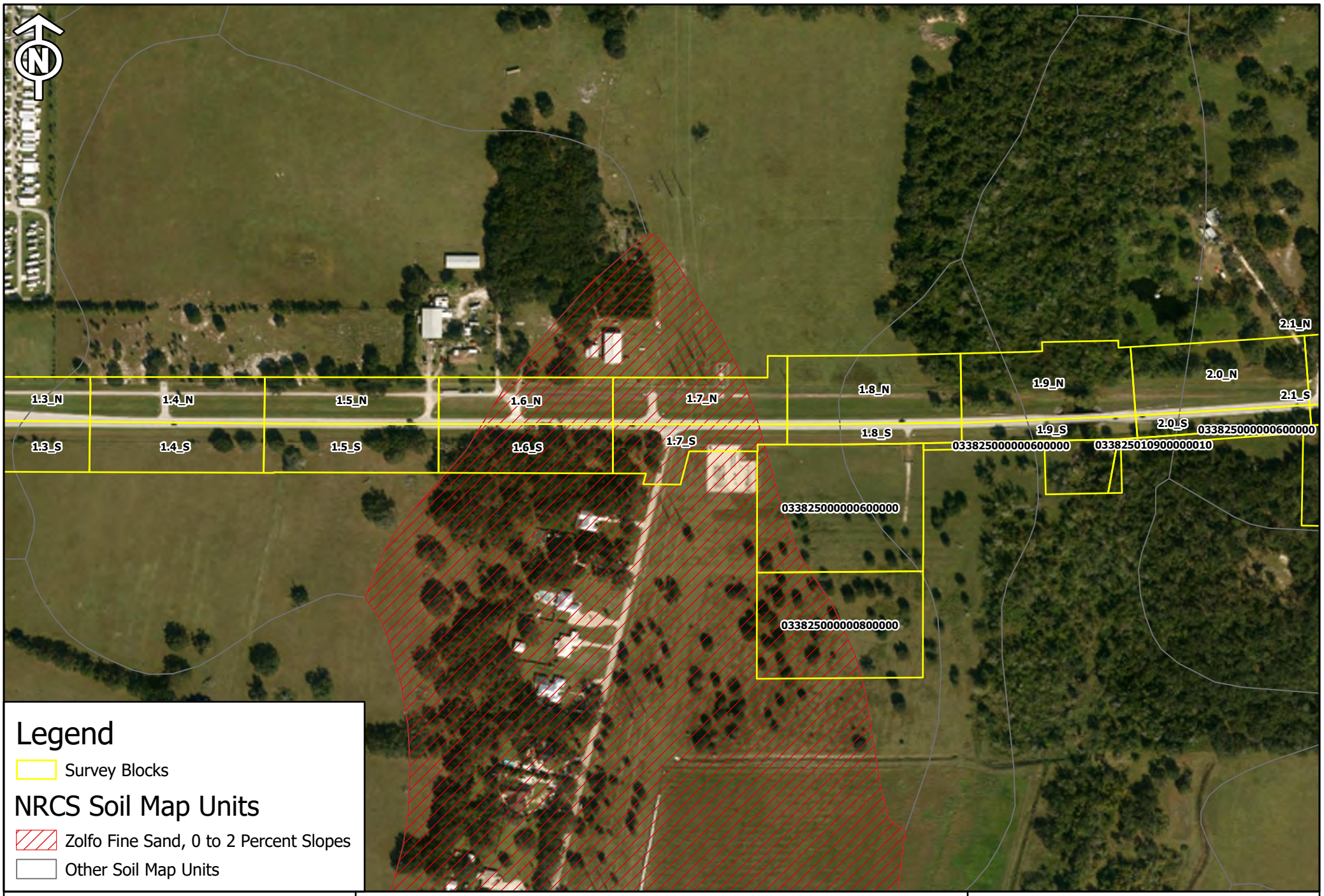

Figure 3-1 - Zolfo Sand Soil Map Units

SR 70 from West of SR 31 to SE Highlands County Line Road
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DeSoto and Highlands Counties, Florida

0 0.13 Miles

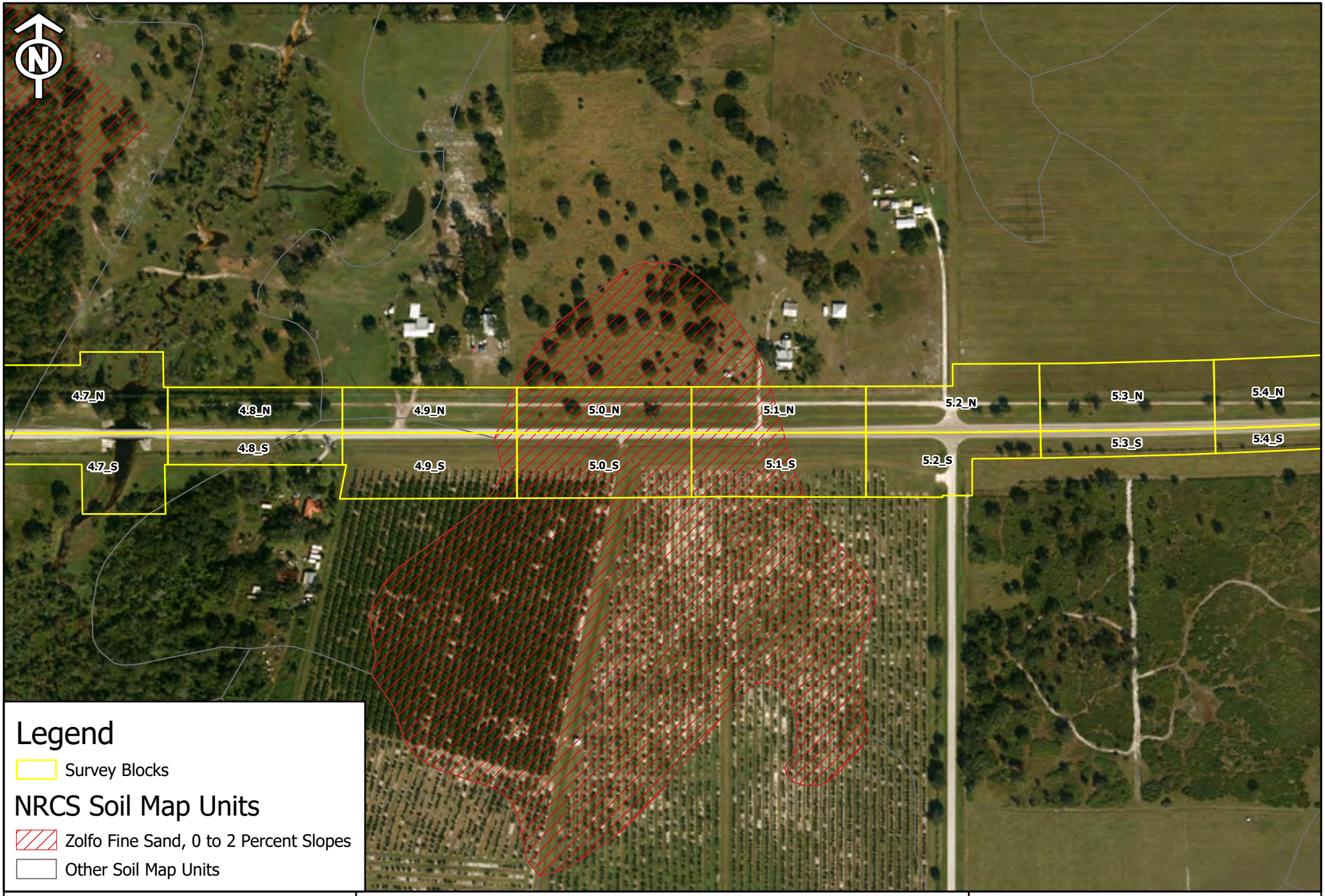

Figure 3-2 - Zolfo Sand Soil Map Units

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.13 Miles

Figure 4-1 - 1940's Potential Xeric Areas

SR 70 from West of SR 31 to SE Highlands County Line Road

FPID 451942-1-22-01

DeSoto and Highlands Counties, Florida

0 0.25 Miles

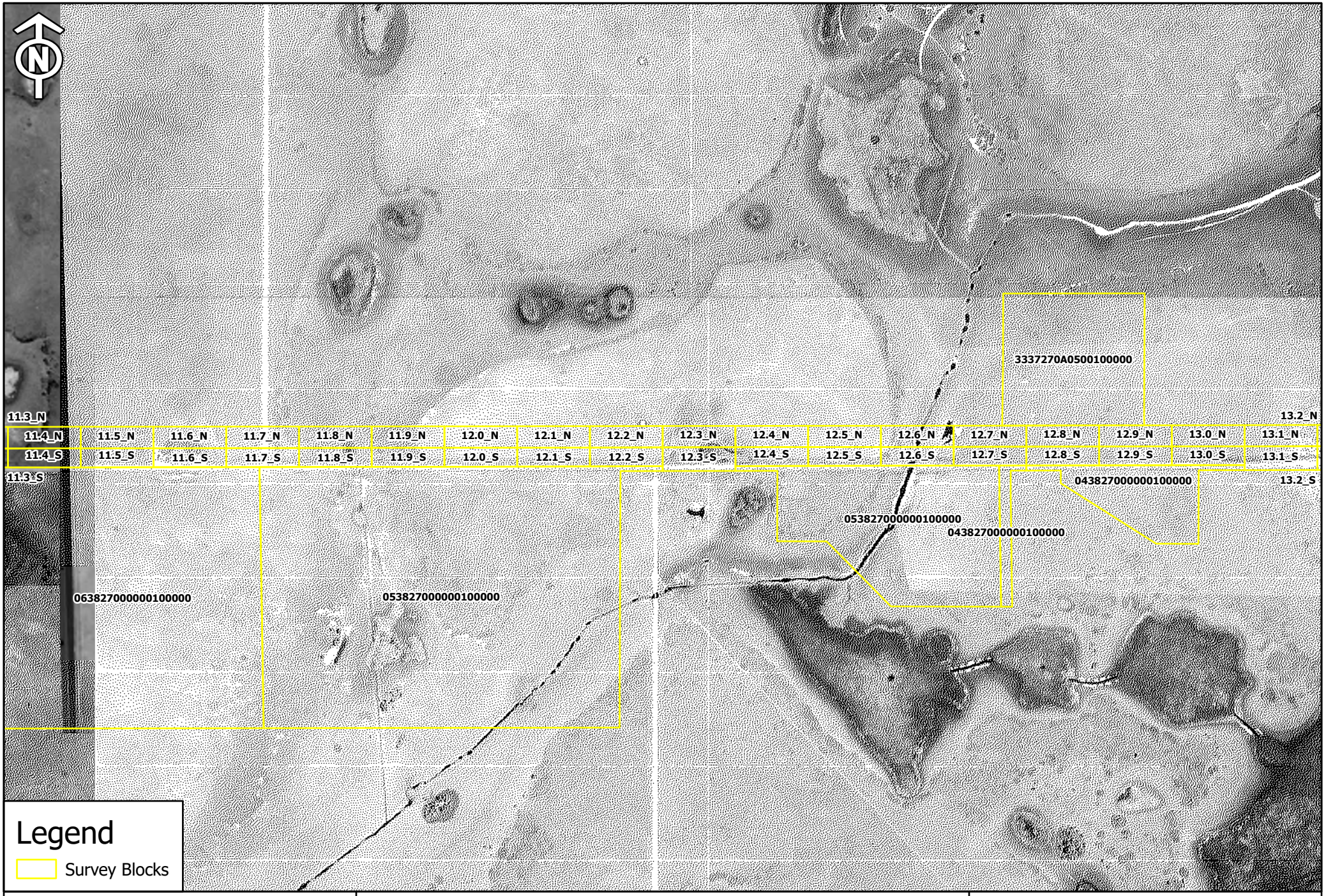

Figure 4-2 - 1940's Potential Xeric Areas

SR 70 from West of SR 31 to SE Highlands County Line Road

FPID 451942-1-22-01

DeSoto and Highlands Counties, Florida

0 0.25 Miles

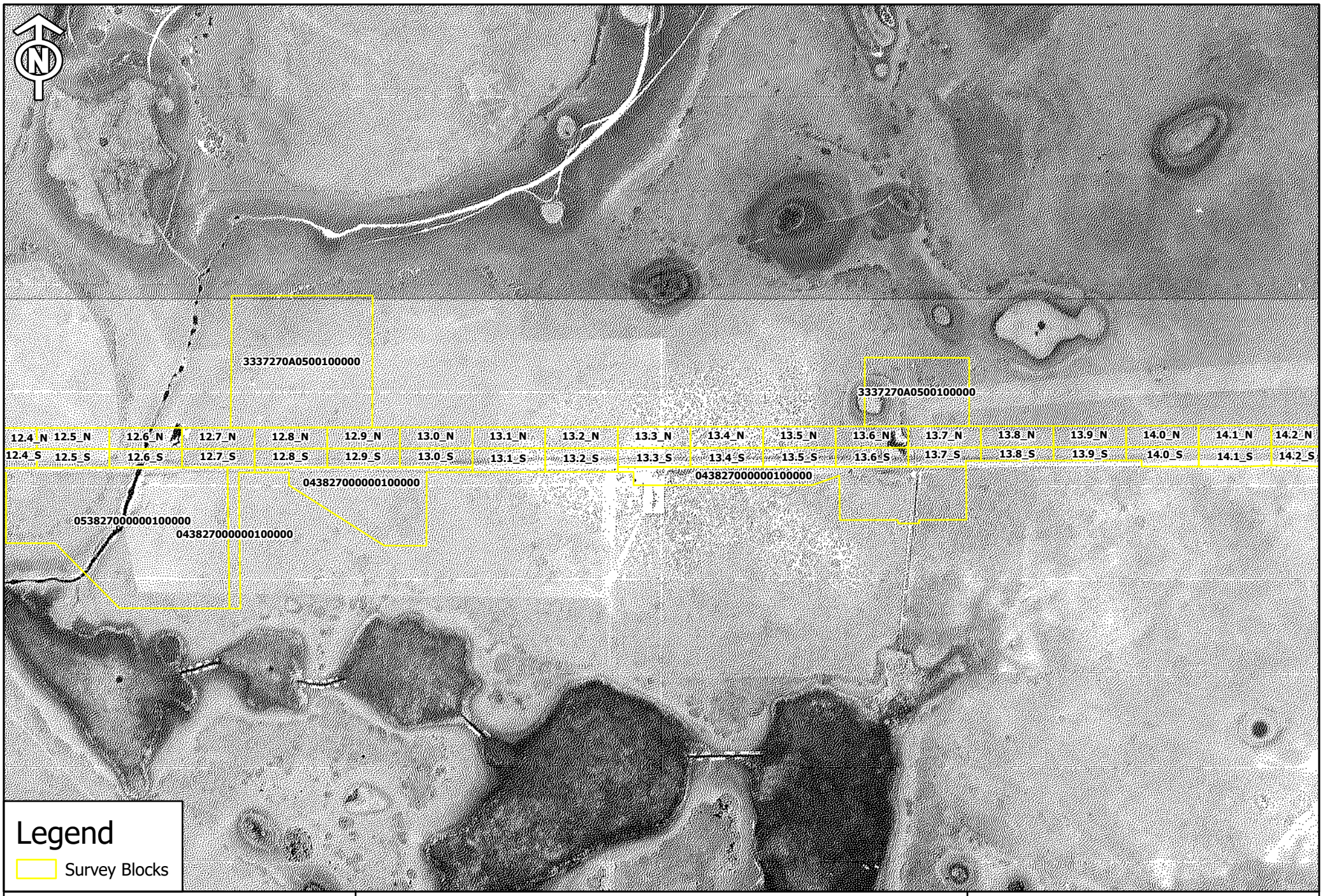

Figure 4-3 - 1940's Potential Xeric Areas

SR 70 from West of SR 31 to SE Highlands County Line Road

FPID 451942-1-22-01

DeSoto and Highlands Counties, Florida

0 0.25 Miles

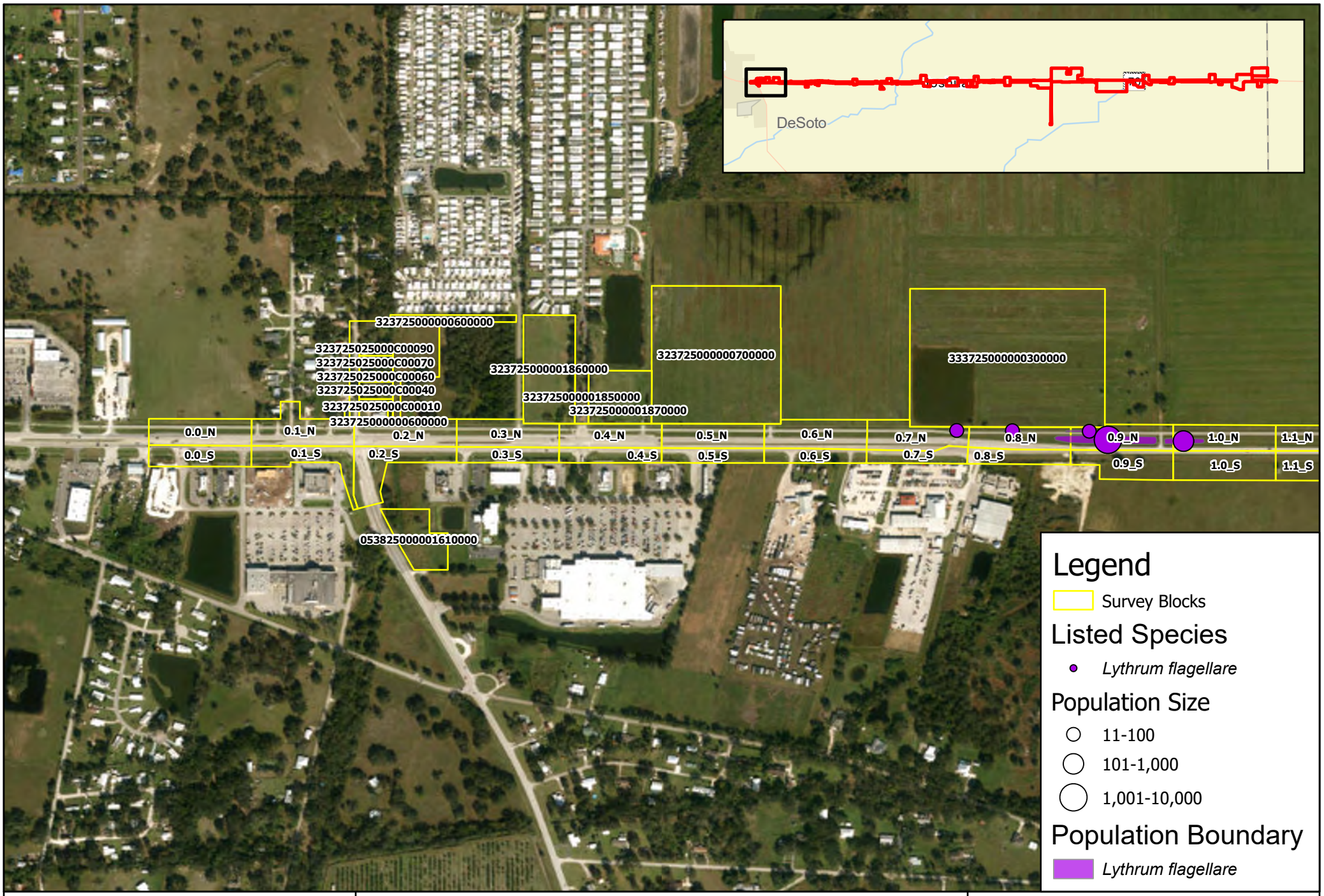

Figure 5-1 - Listed Species Occurrences

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FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

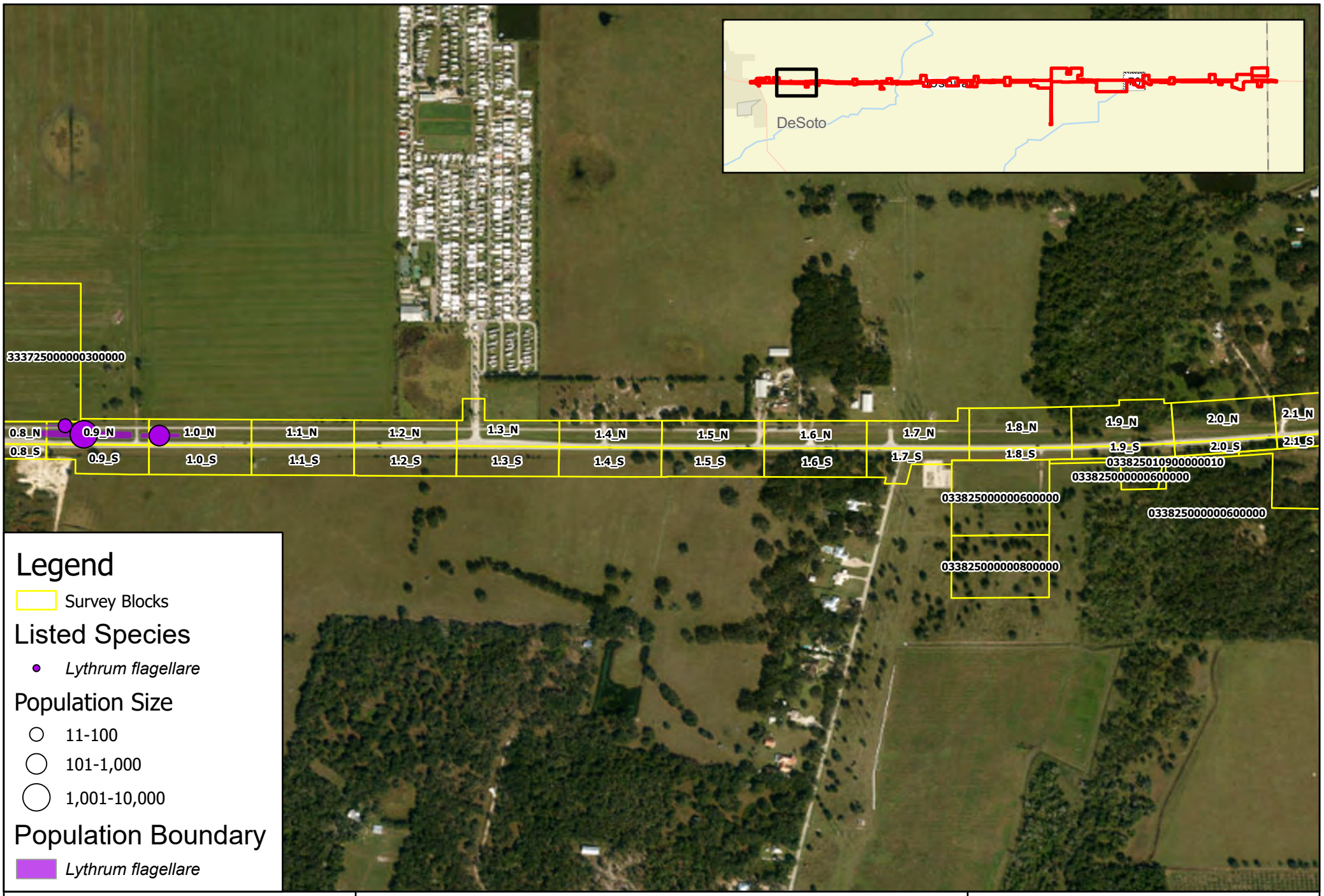


Figure 5-2 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

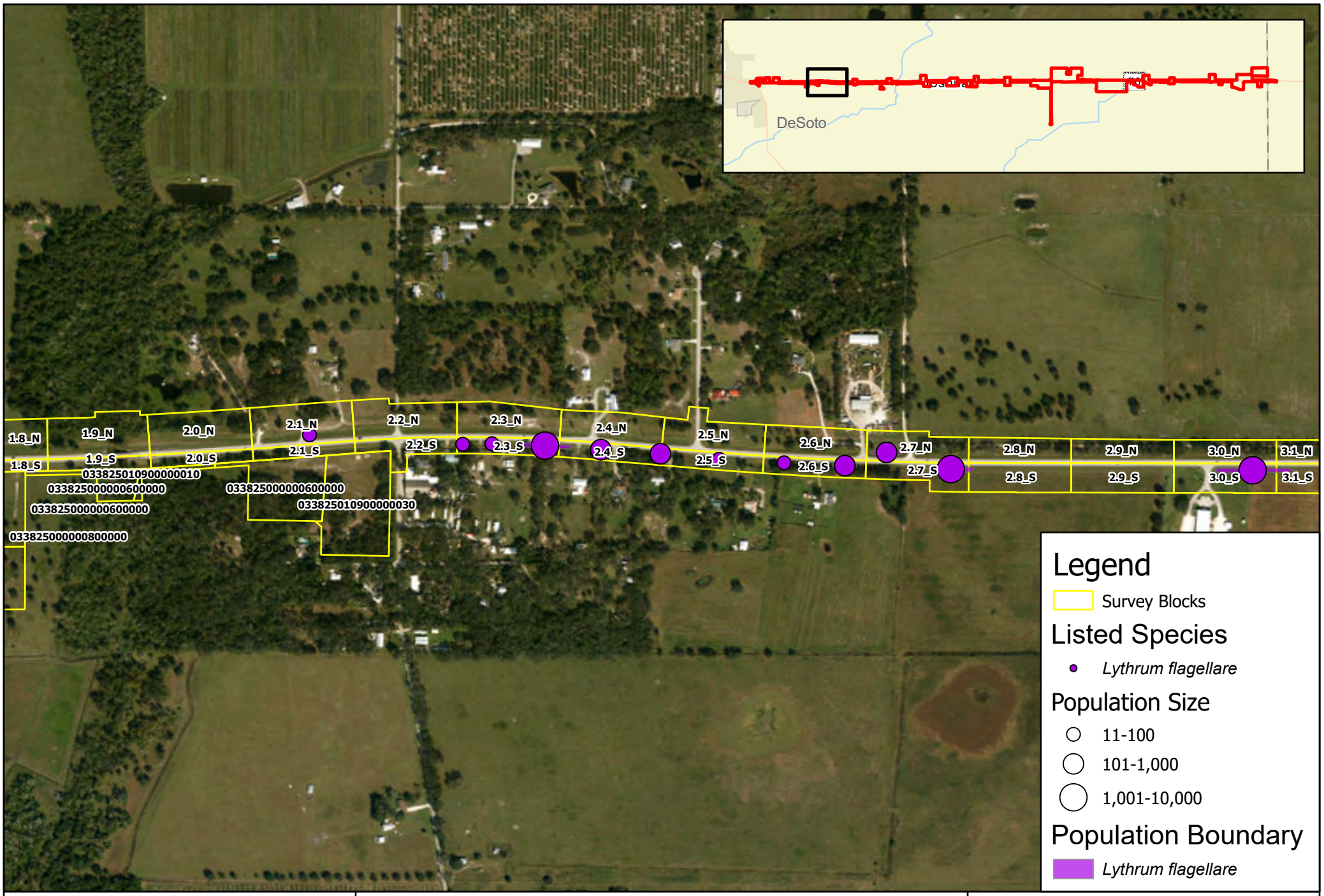


Figure 5-3 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

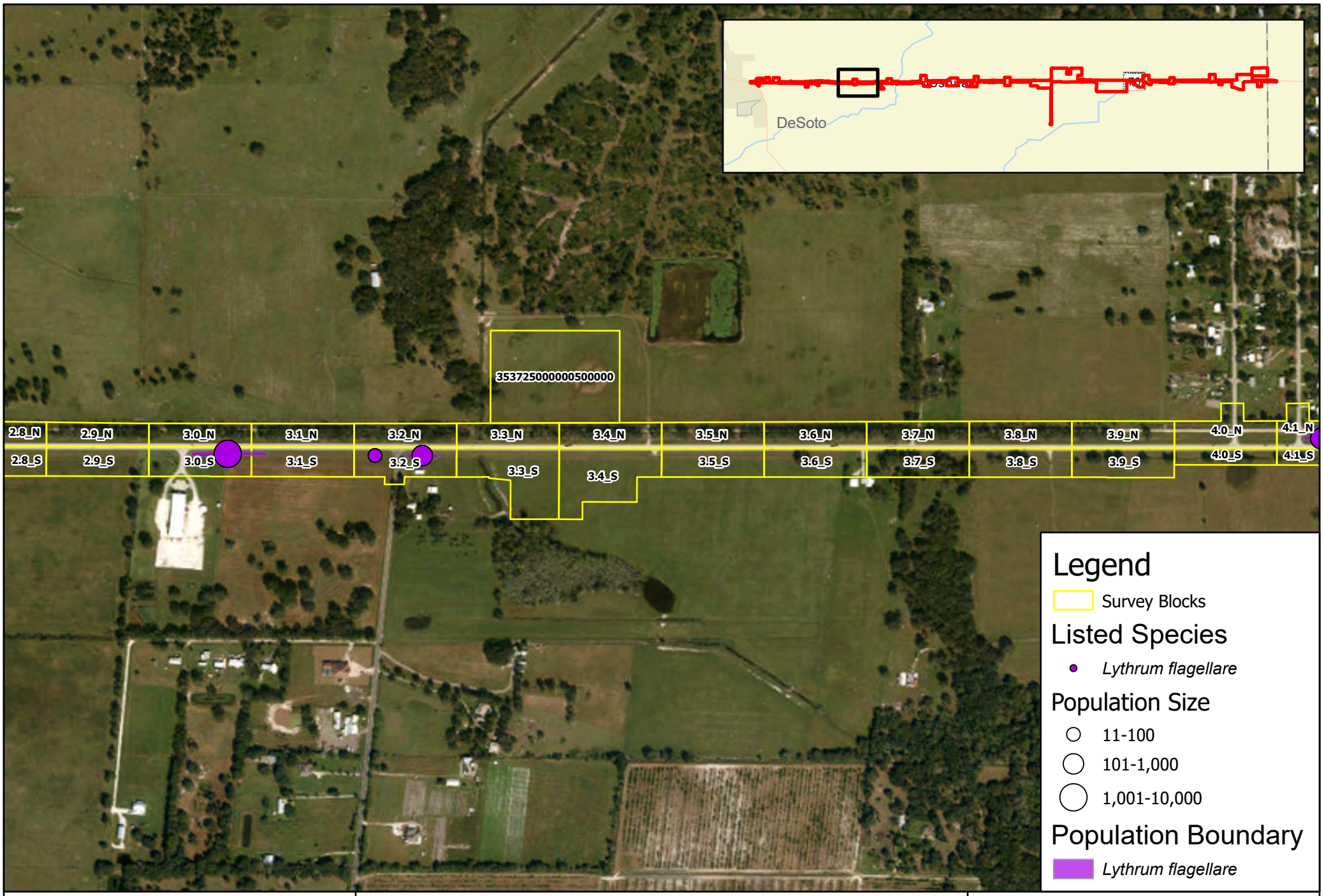


Figure 5-4 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

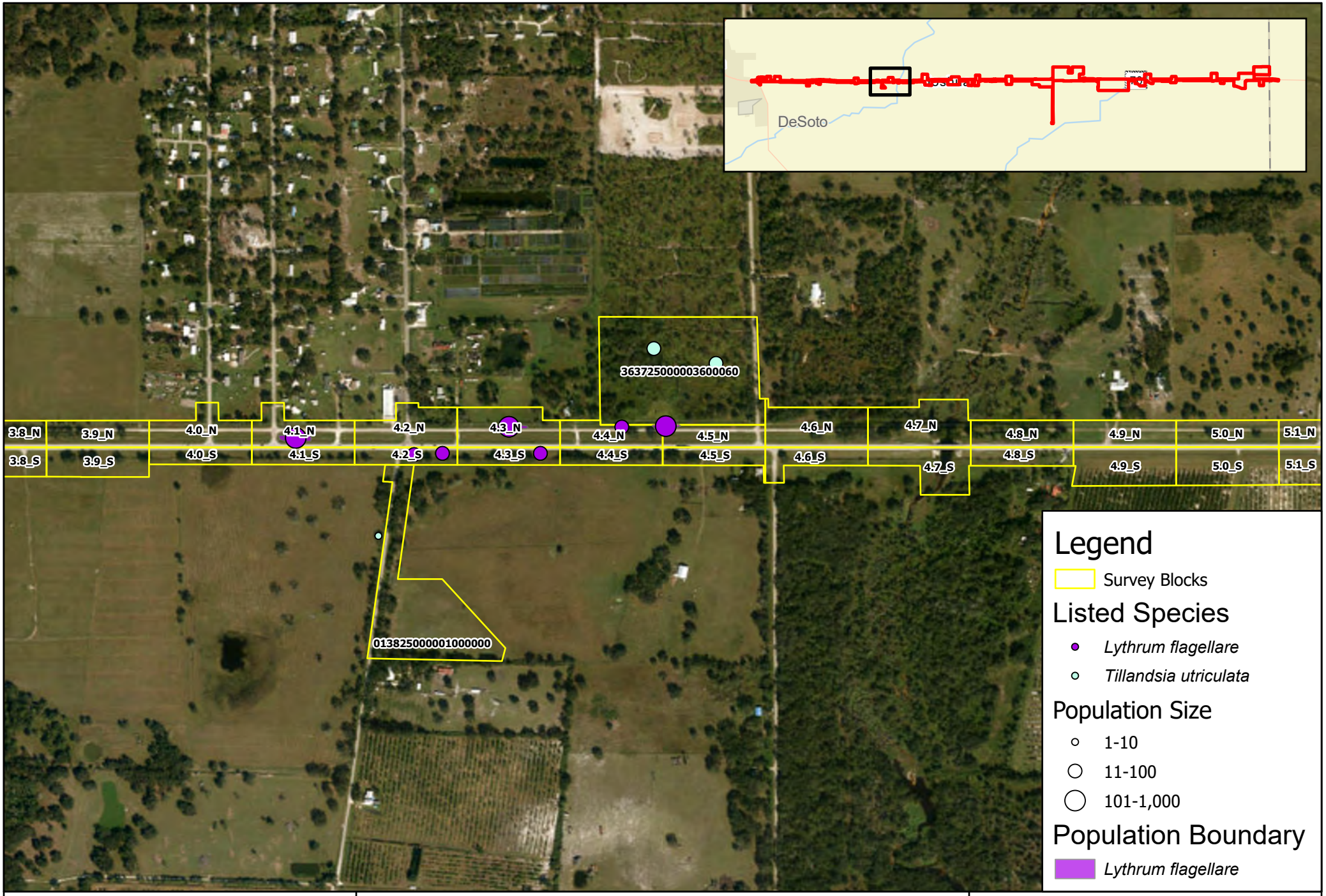


Figure 5-5 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

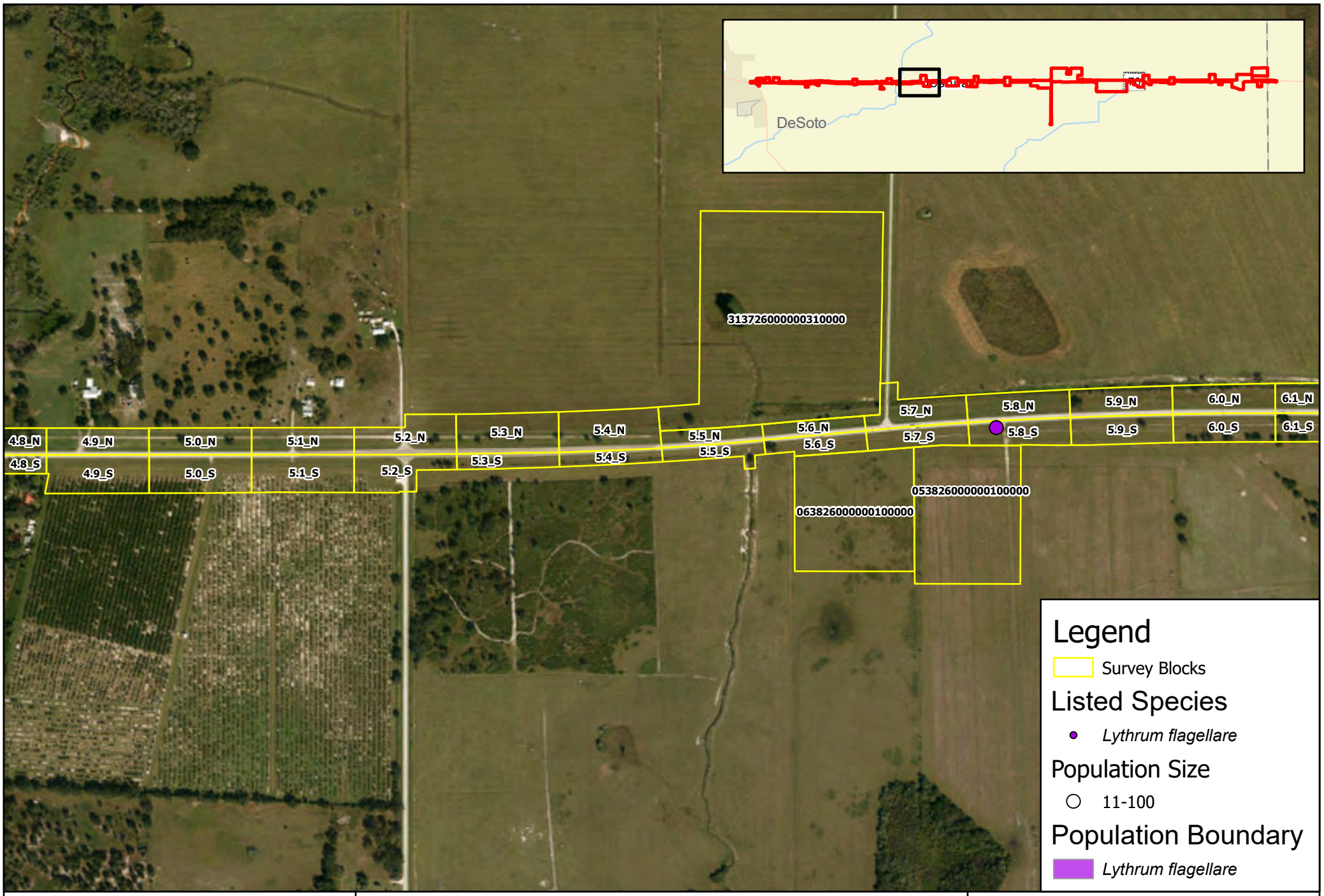


Figure 5-6 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

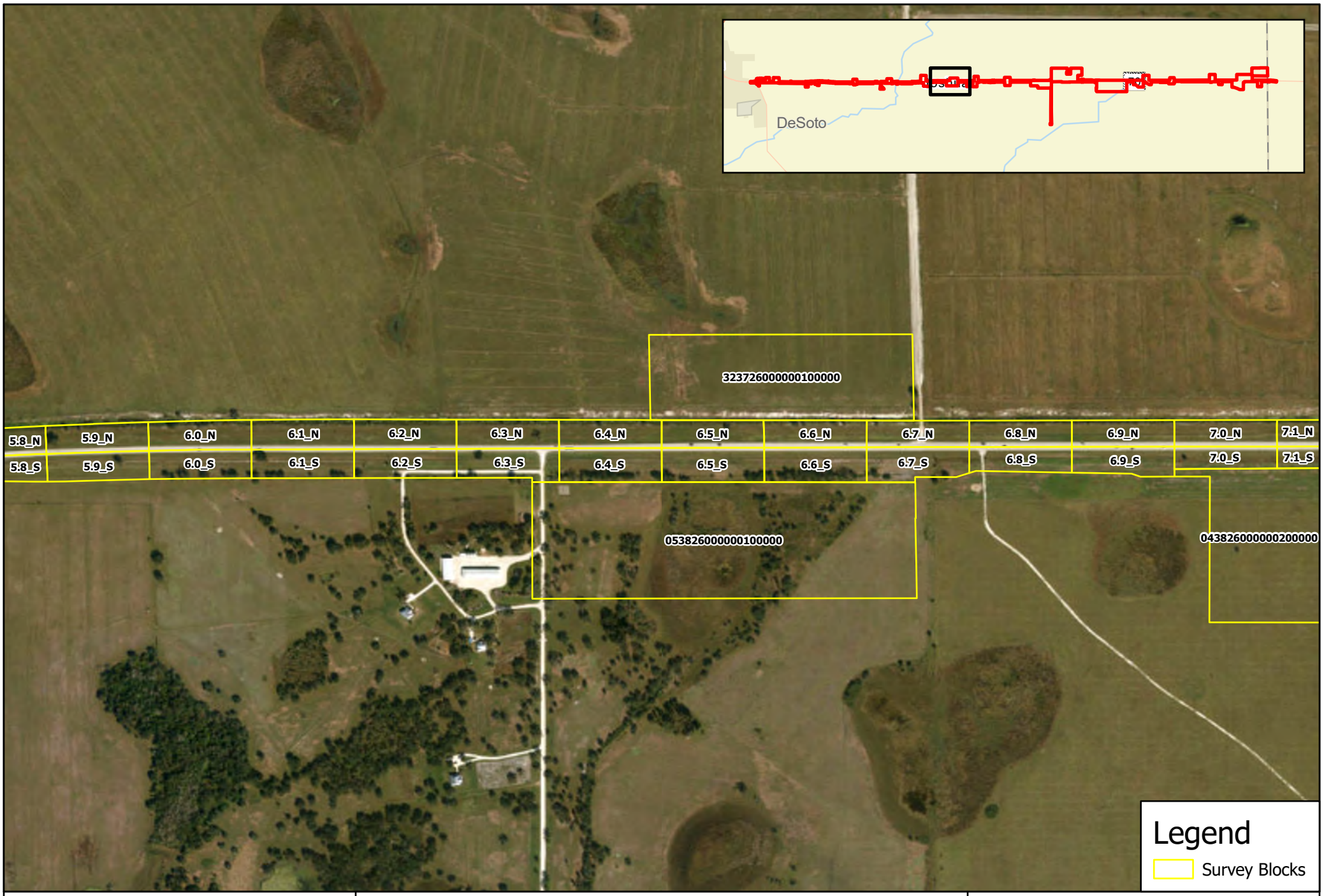


Figure 5-7 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

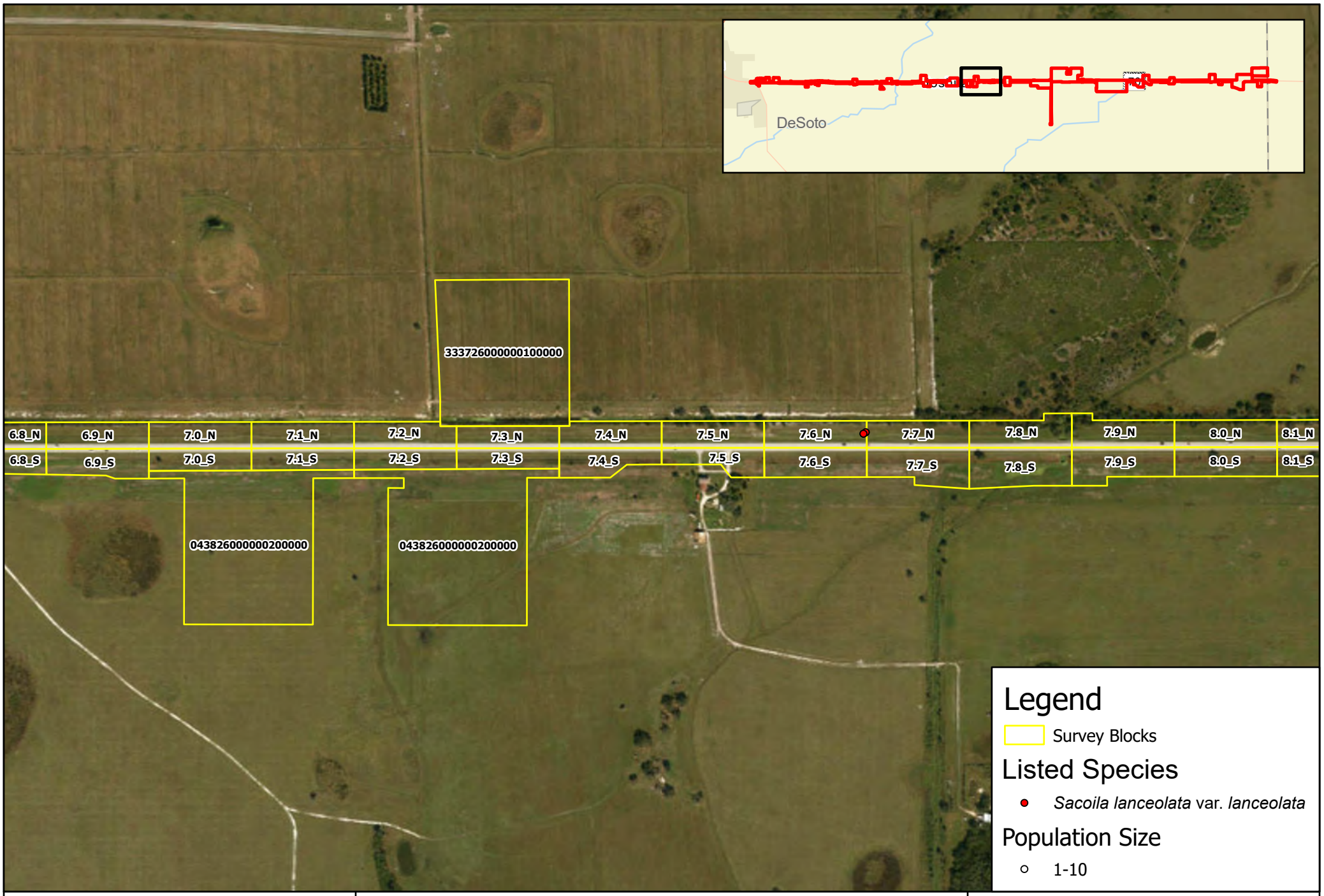


Figure 5-8 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

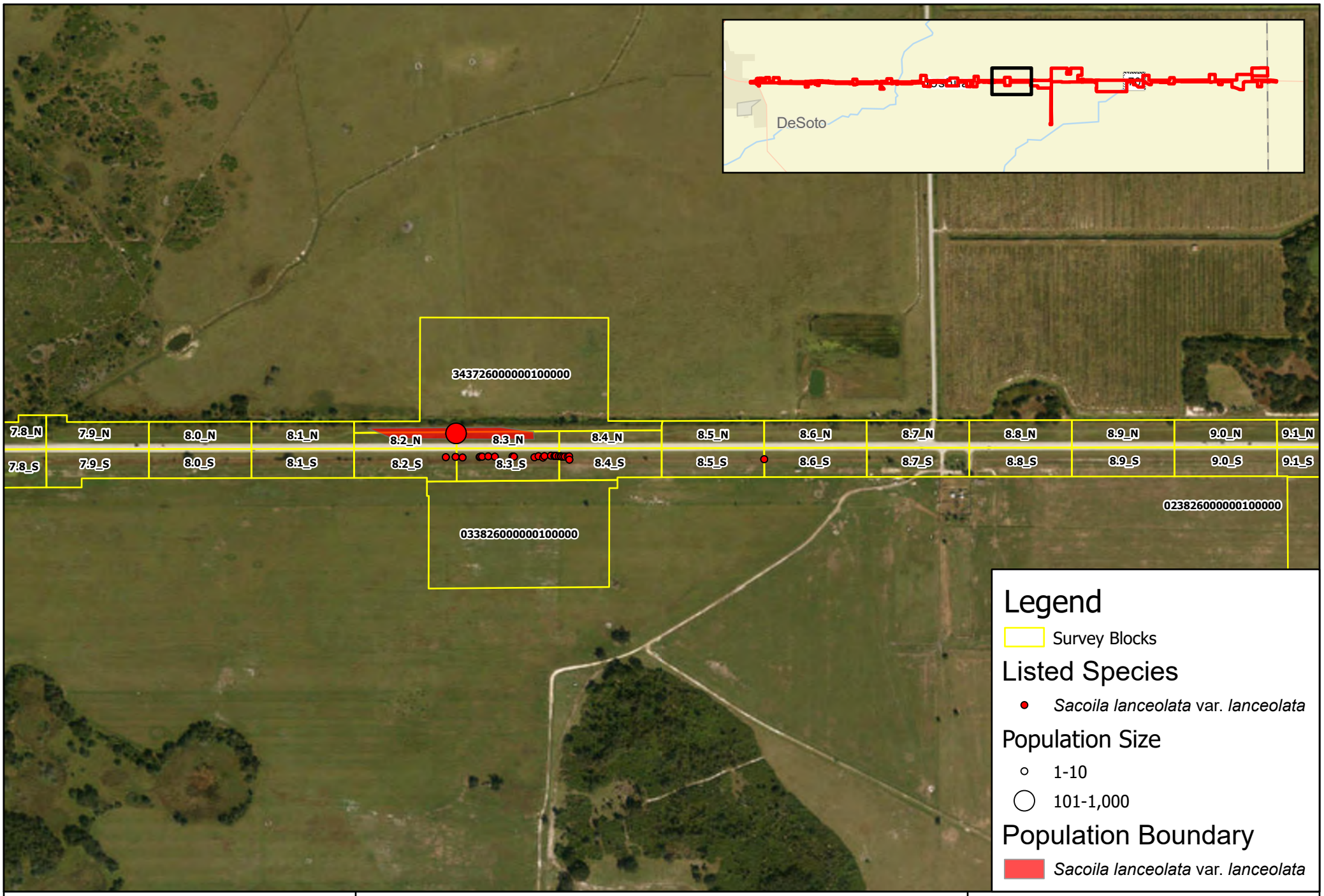


Figure 5-9 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

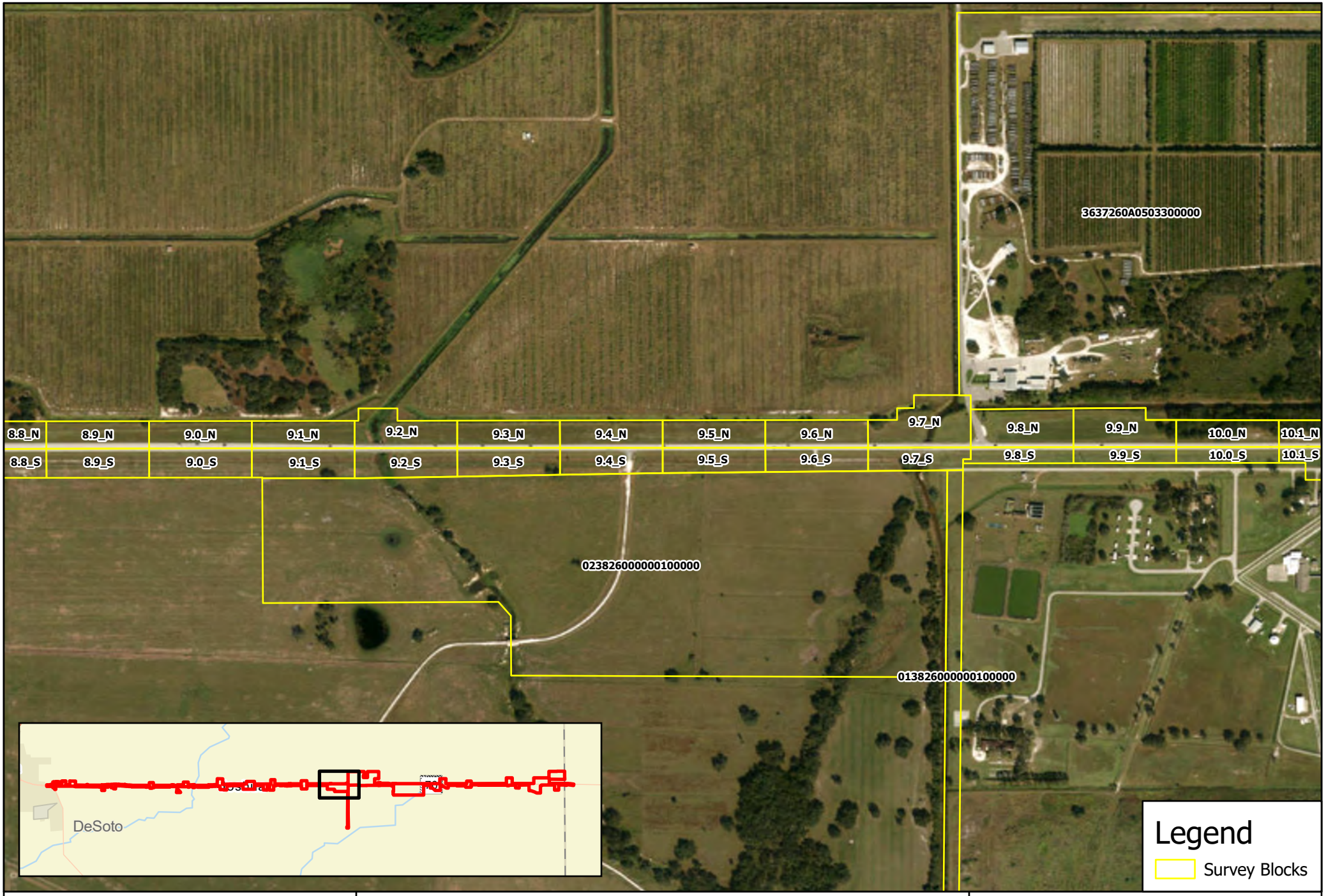


Figure 5-10 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

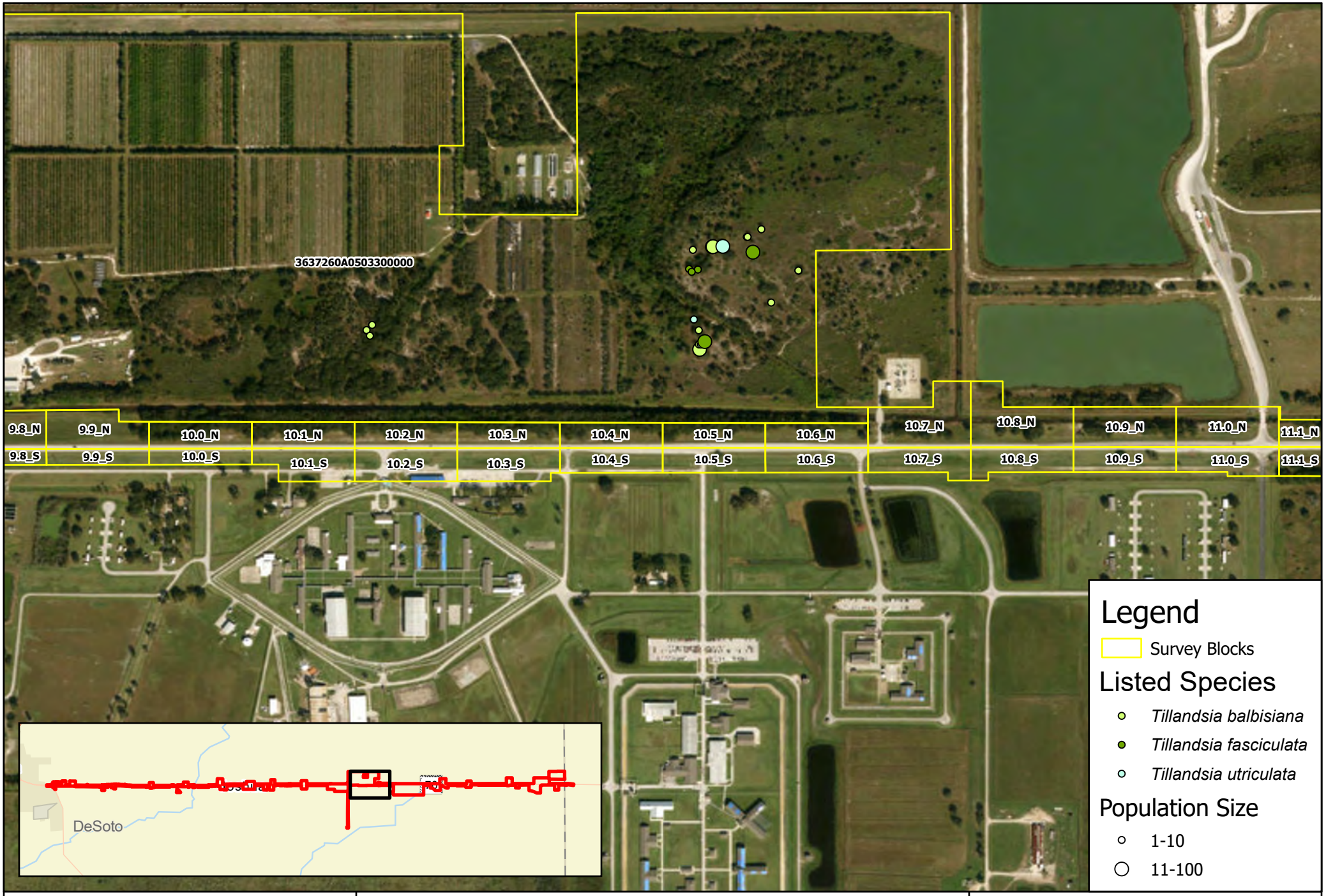


Figure 5-11 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

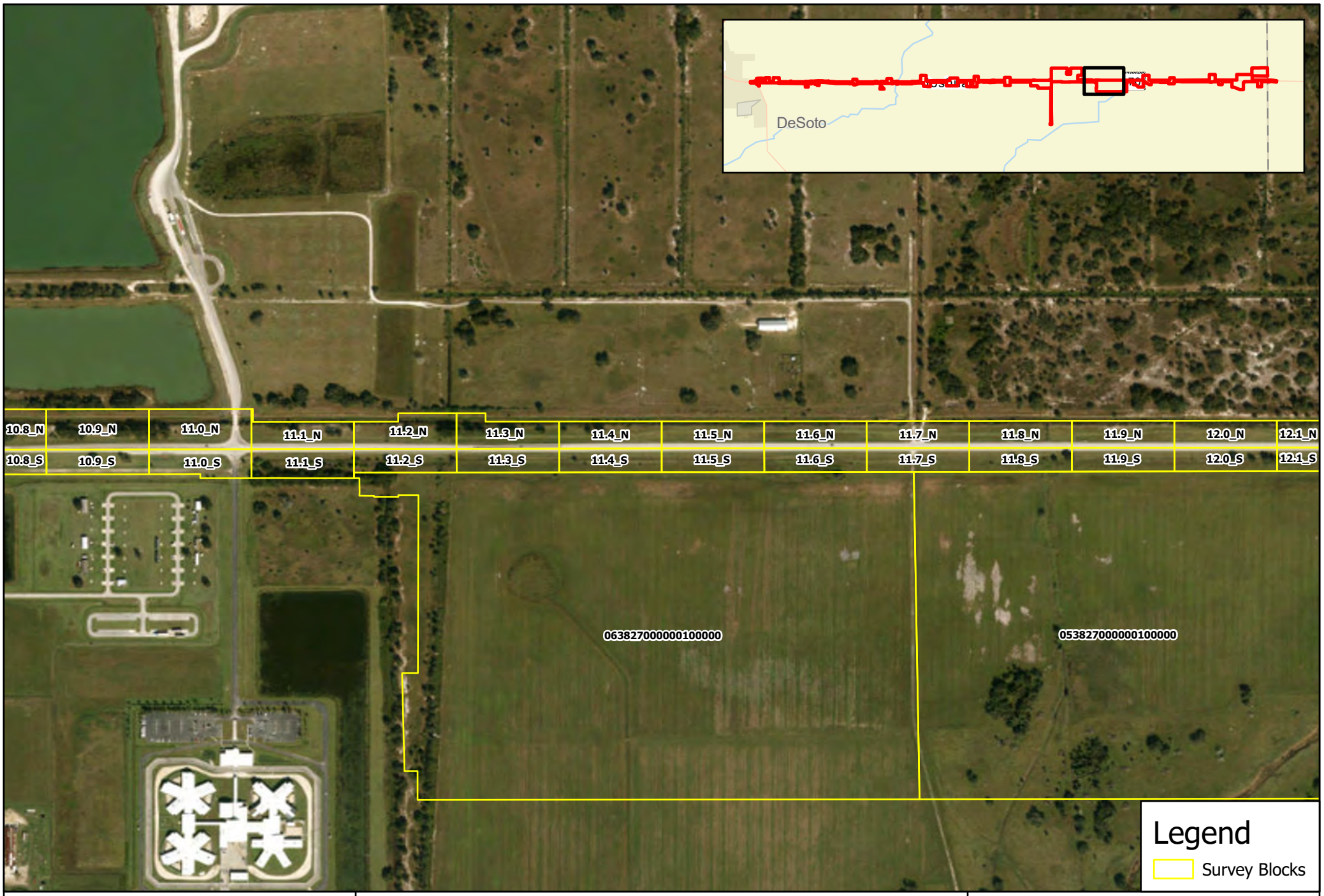


Figure 5-12 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

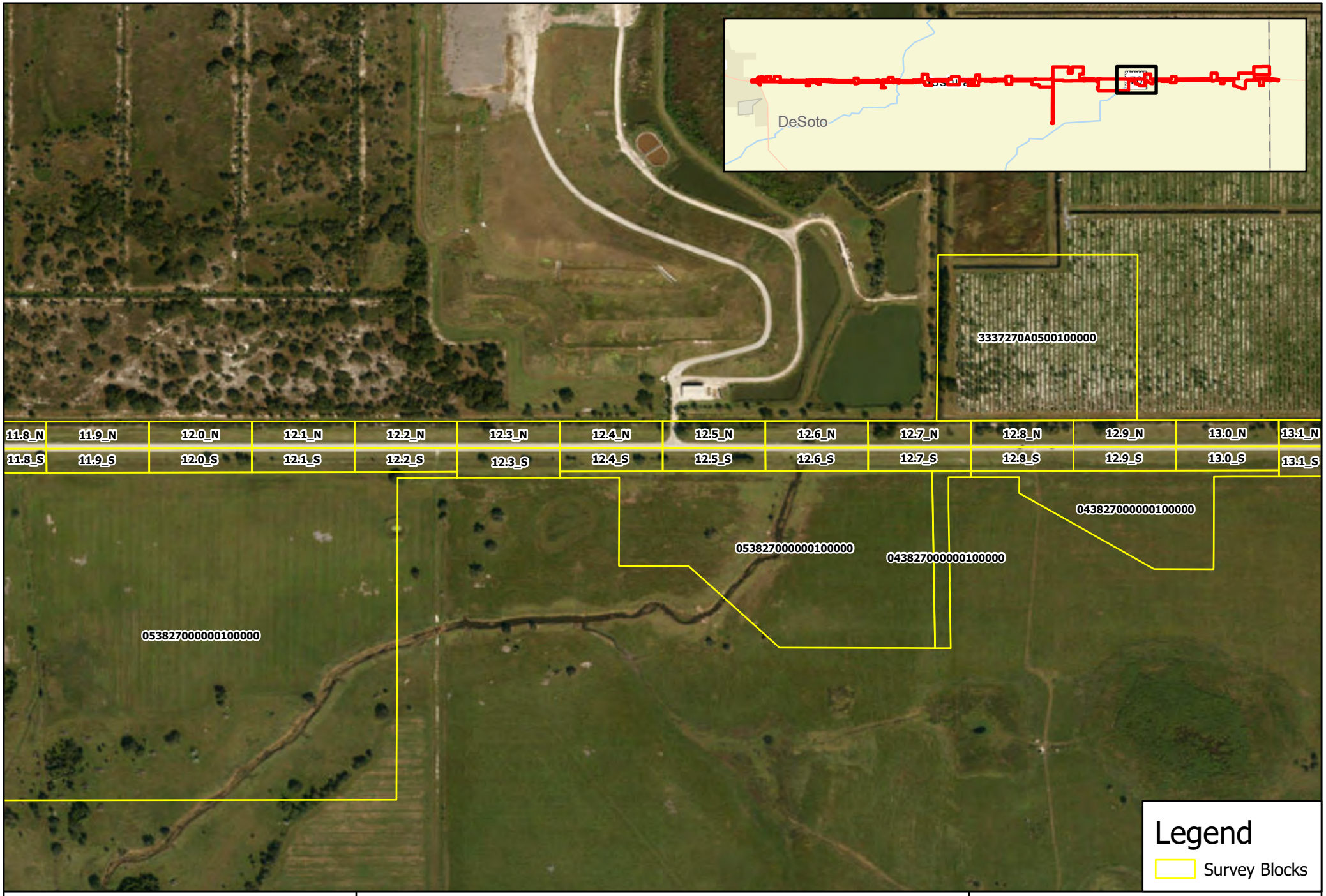


Figure 5-13 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

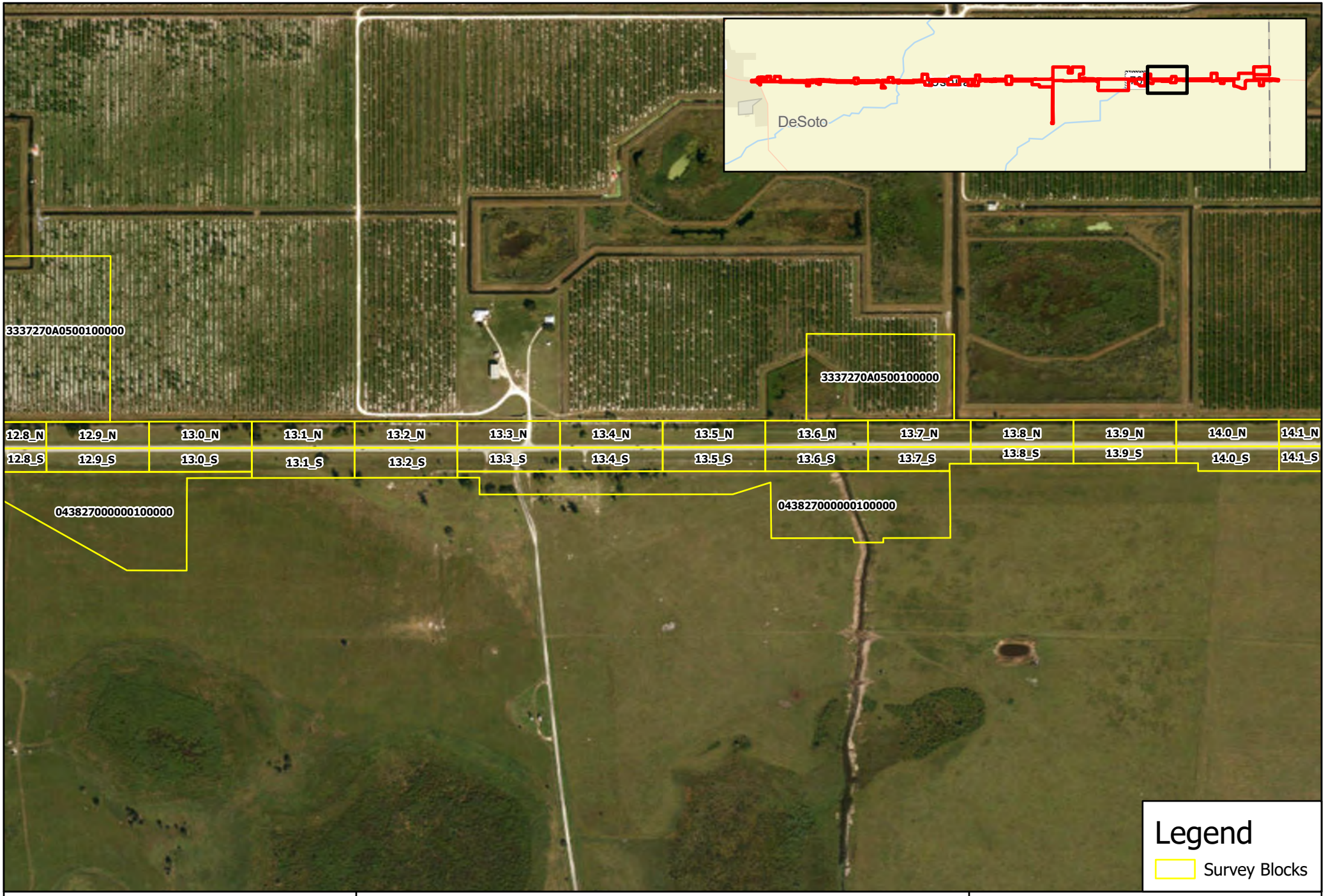


Figure 5-14 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

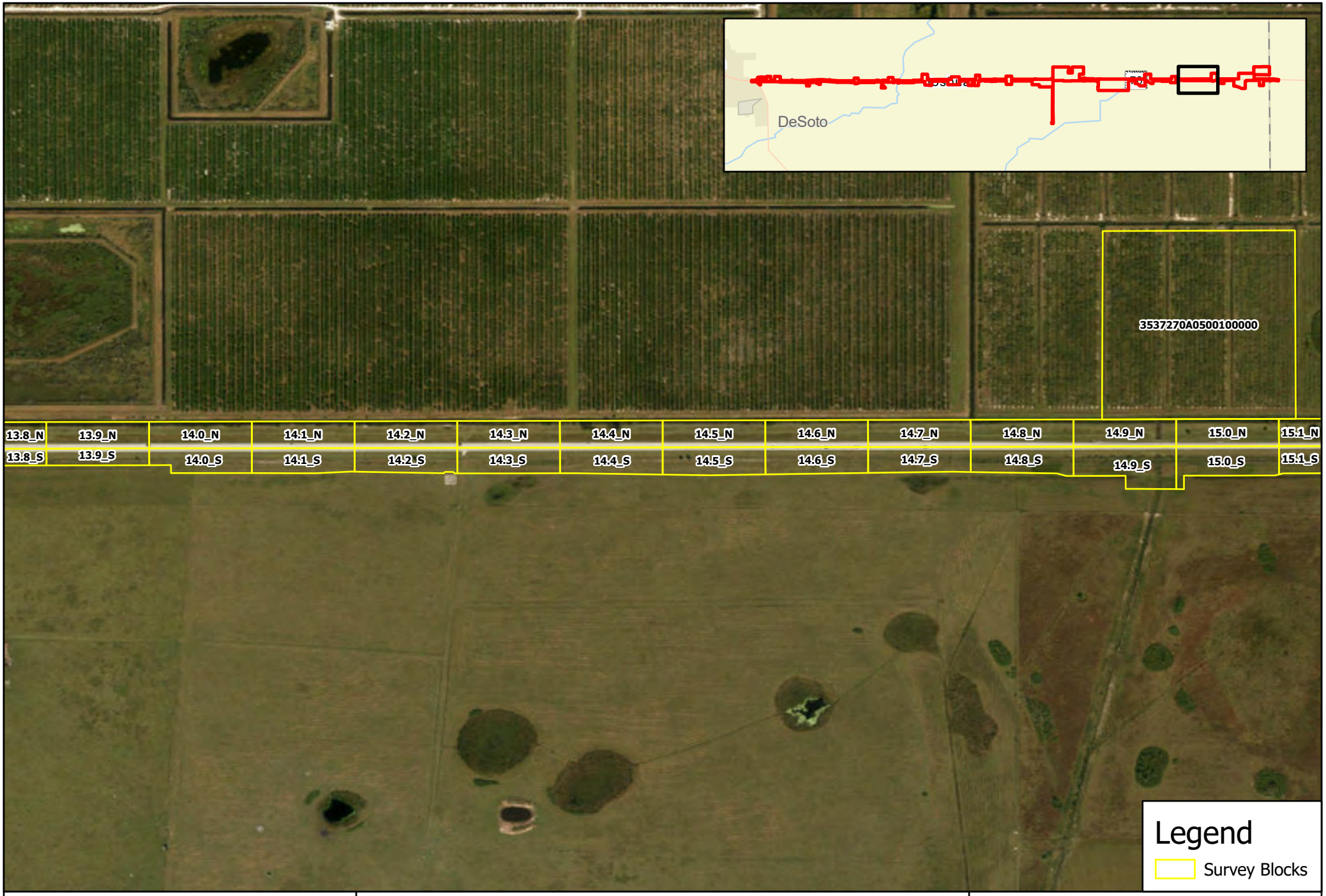


Figure 5-15 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

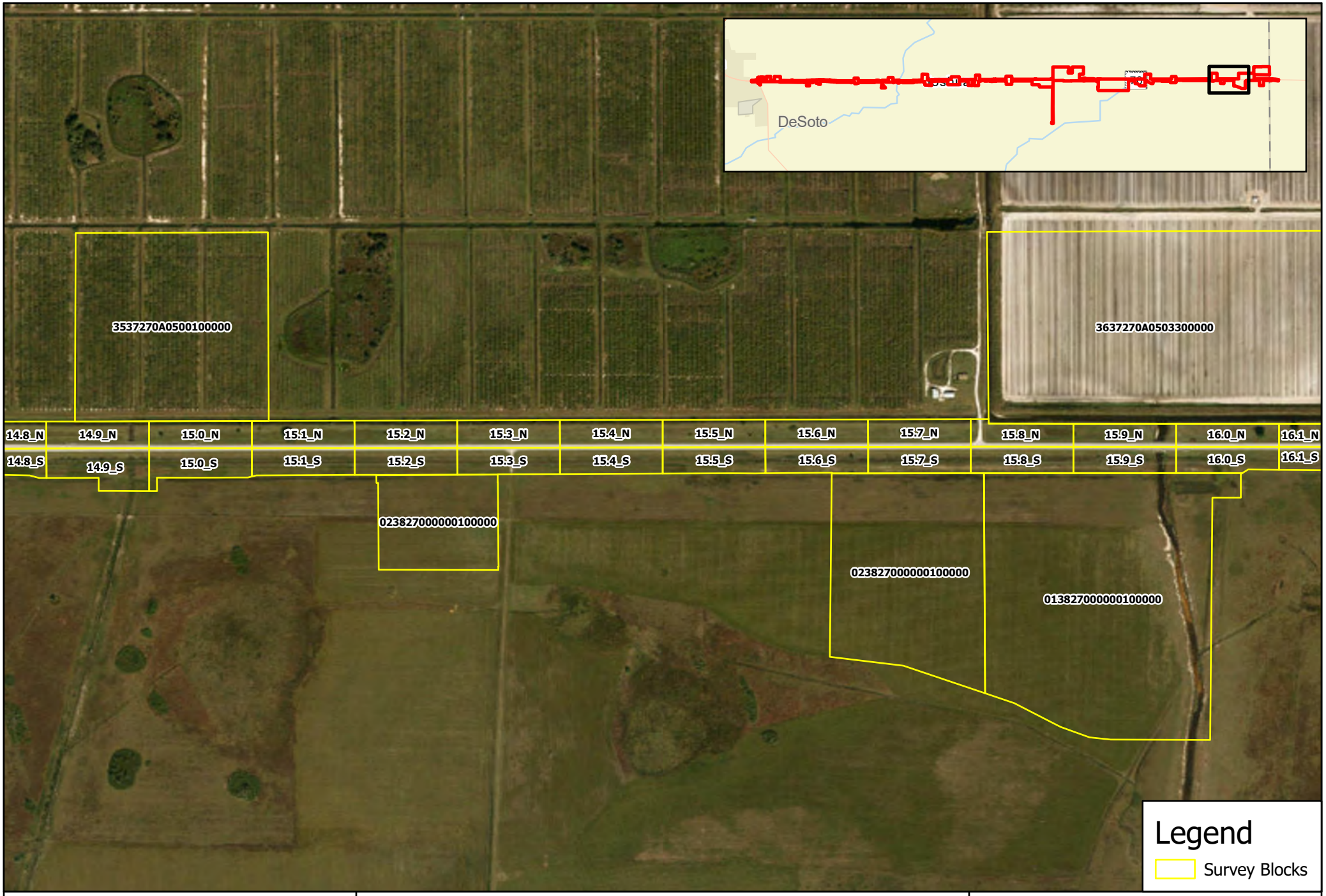


Figure 5-16 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

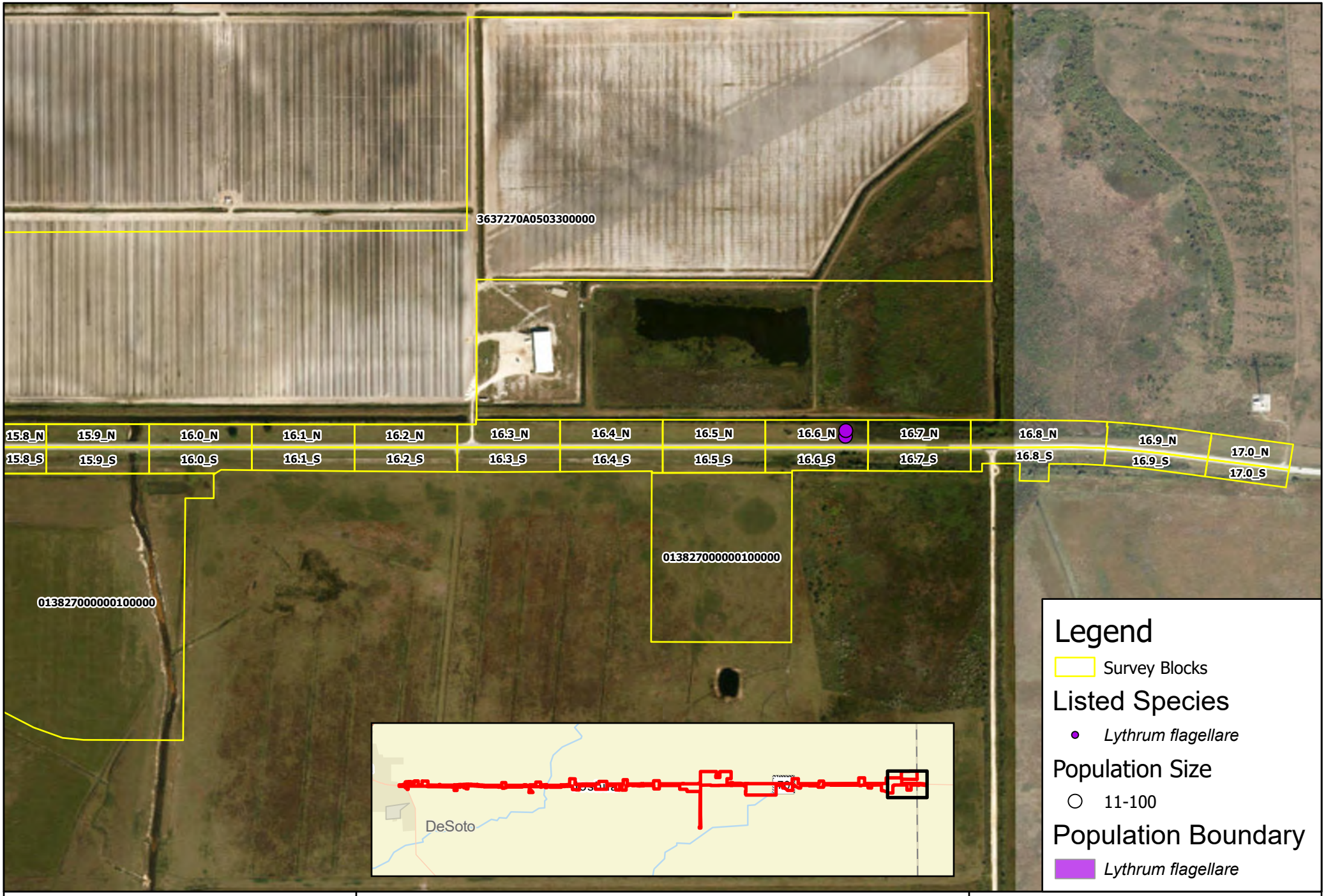


Figure 5-17 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

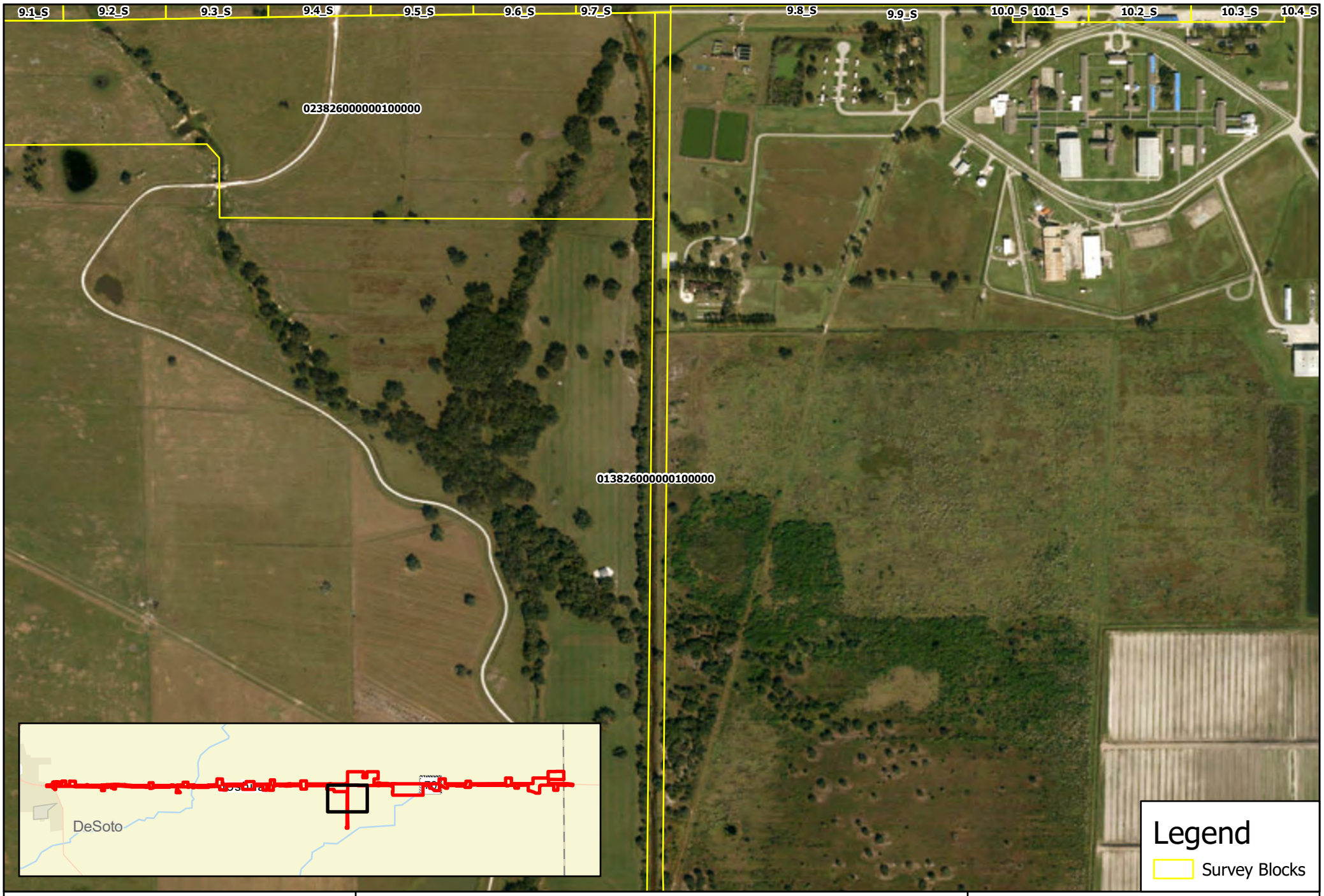


Figure 5-18 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

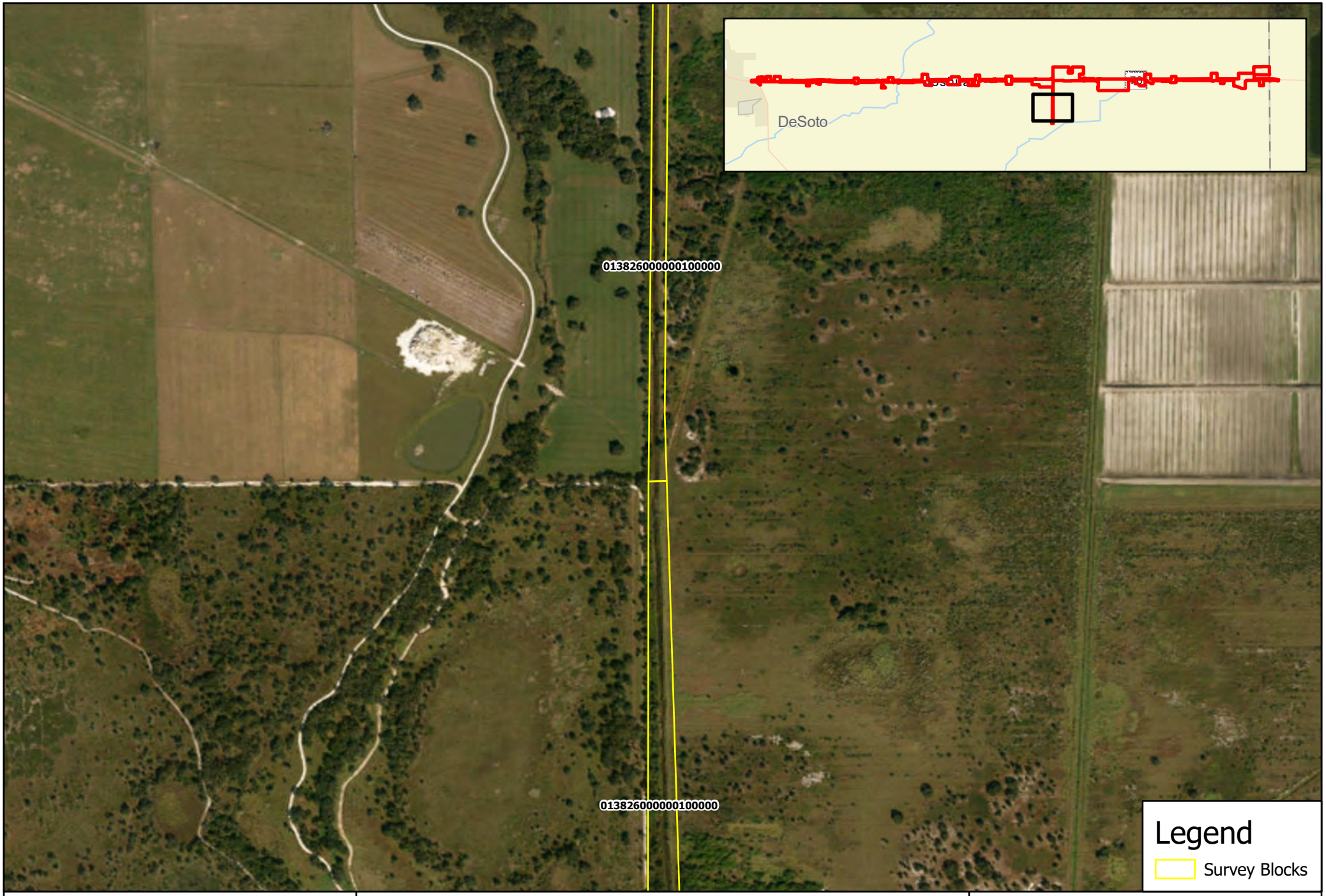


Figure 5-19 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

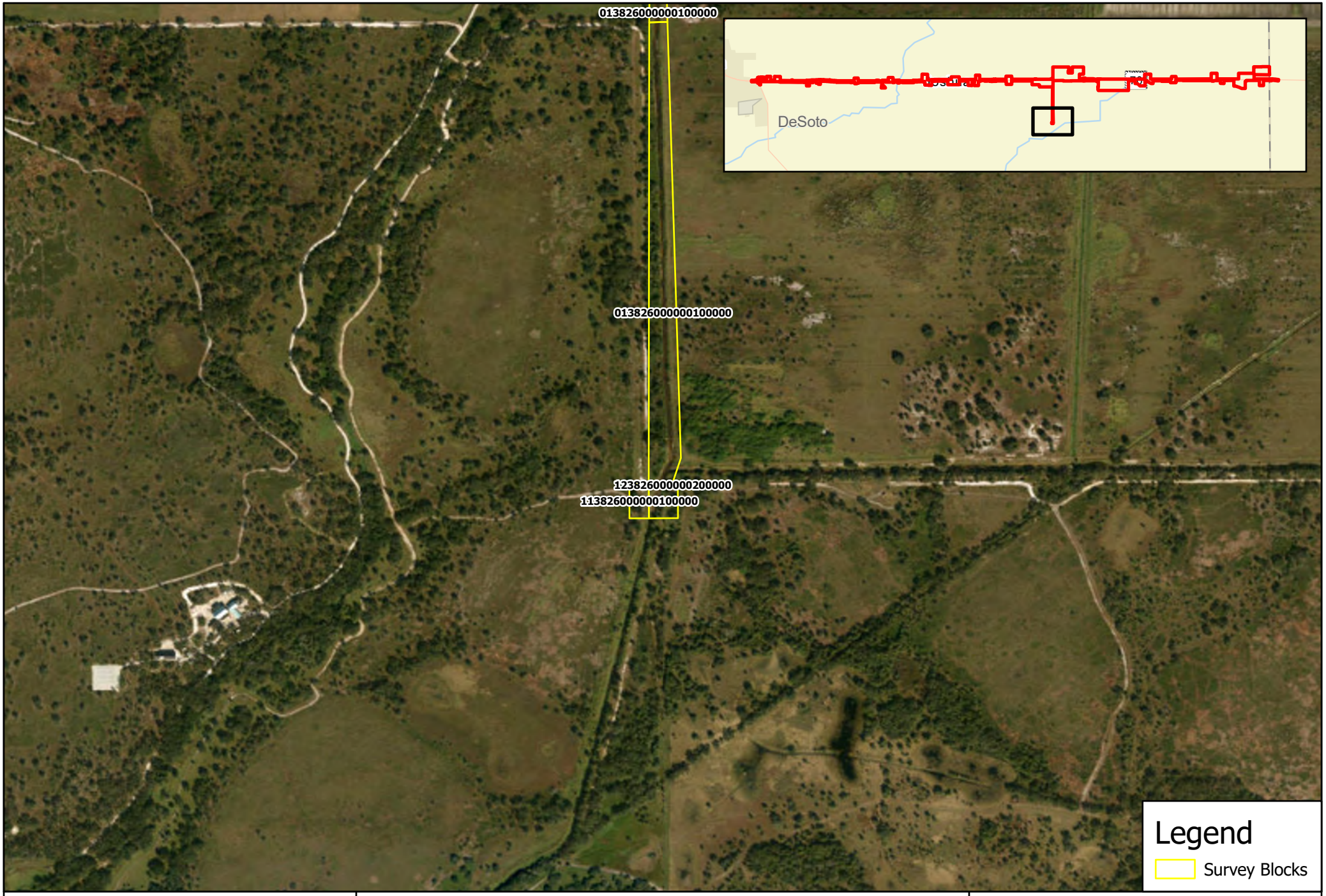


Figure 5-20 - Listed Species Occurrences

SR 70 from West of SR 31 to SE Highlands County Line Road
FPID 451942-1-22-01
DeSoto and Highlands Counties, Florida

0 0.125 0.25 Miles

Appendix A

Representative Photographs

Photo 1 - Florida loosestrife in survey block 16.6 N

Photo 2 - Leafless beaked ladiestress in survey block 7.6 N

Photo 3 - Northern needleleaf in Parcel No. 3637260A0503300000

Photo 4 - Cardinal airplant in Parcel No. 3637260A0503300000

Photo 5 - Giant airplant in Parcel No. 363725000003600060

Photo 6 - Dry Prairie in Parcel No. 053826000000100000

Photo 7 - Dry prairie in Parcel No. 113826000000100000

Photo 8 - Dry prairie in Parcel No. 3637260A0503300000

Photo 9 - Forested wetland in survey block 10.1 N

Photo 10 - Mesic hammock in Parcel No. 3637260A0503300000

Photo 11 - Wet prairie in Parcel No. 053826000000100000

Photo 12 - Xeric area in survey block 13.4 N. Note relict sand live oak.

Photo 13 - Xeric area in Parcel No. 033825010900000020

Photo 14 - Department of Corrections spur typical habitat

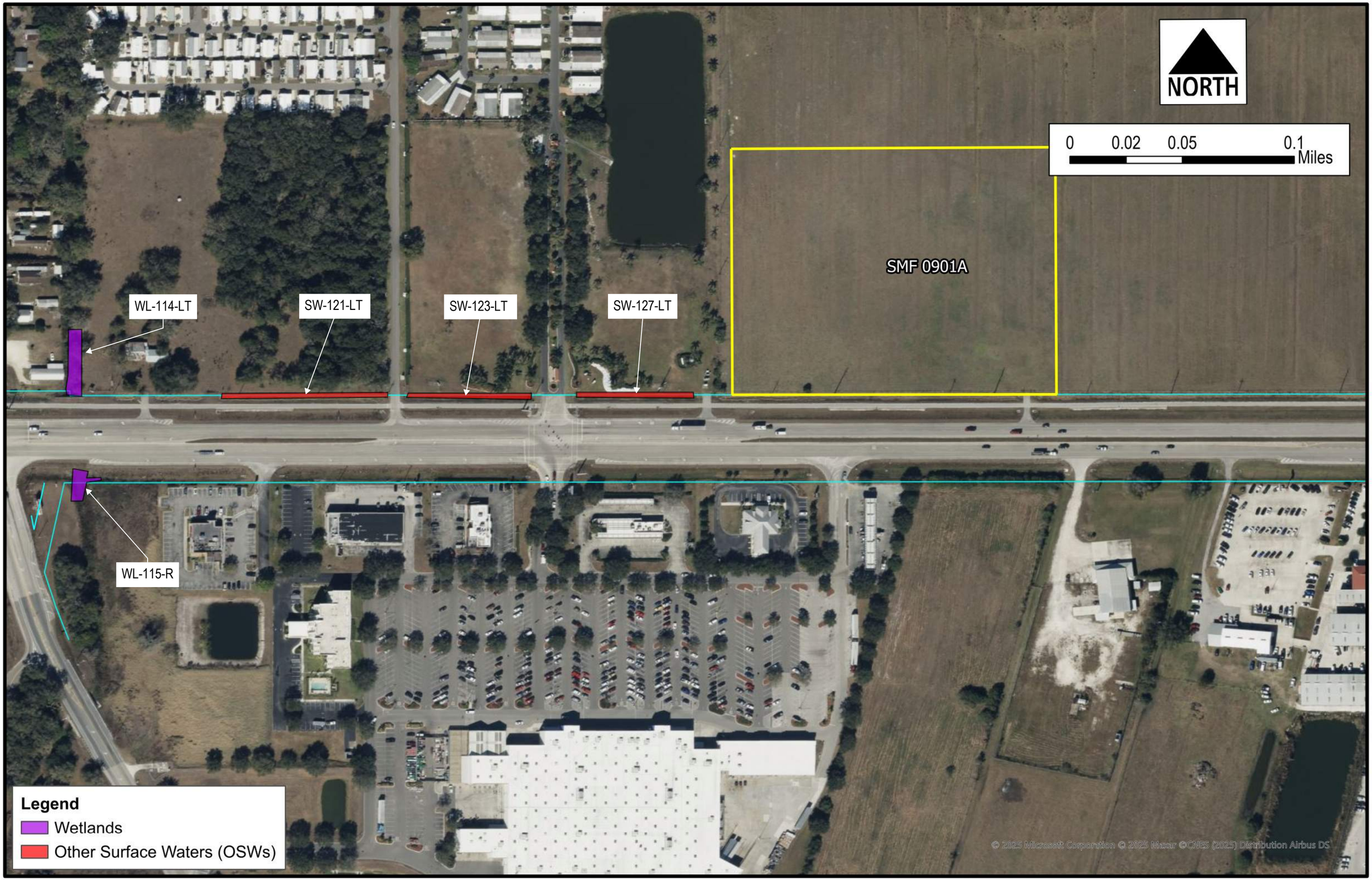
Photo 15 – Outer margin of freshwater marsh Parcel No. 3637270A0503300000

Photo 16 – Typical freshwater marsh in Parcel No. 3637270A0503300000

APPENDIX N

Wetland Location Maps

NORTH
0
0.02
0.05
0.1
Miles
WL-114-LT
SW-102-R
SW-104-R
SW-106-R
SW-108-R
SW-111-R
Legend
Wetlands
Other Surface Waters (OSWs)
© 2025 Microsoft Corporation © 2025 Maxar ©CNES (2025) Distribution Airbus DS


NORTH
0 0.02 0.05 0.1
Miles
SMF 0901A
WL-114-LT
SW-121-LT
SW-123-LT
SW-127-LT
WL-115-R
Legend
Wetlands
Other Surface Waters (OSWs)
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NORTH
0
0.02
0.05
0.1
Miles
SW-146-R
Legend
Wetlands
Other Surface Waters (OSWs)
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NORTH
0
0.02
0.05
0.1
Miles
WL-171-LT
Legend
Wetlands
Other Surface Waters (OSWs)
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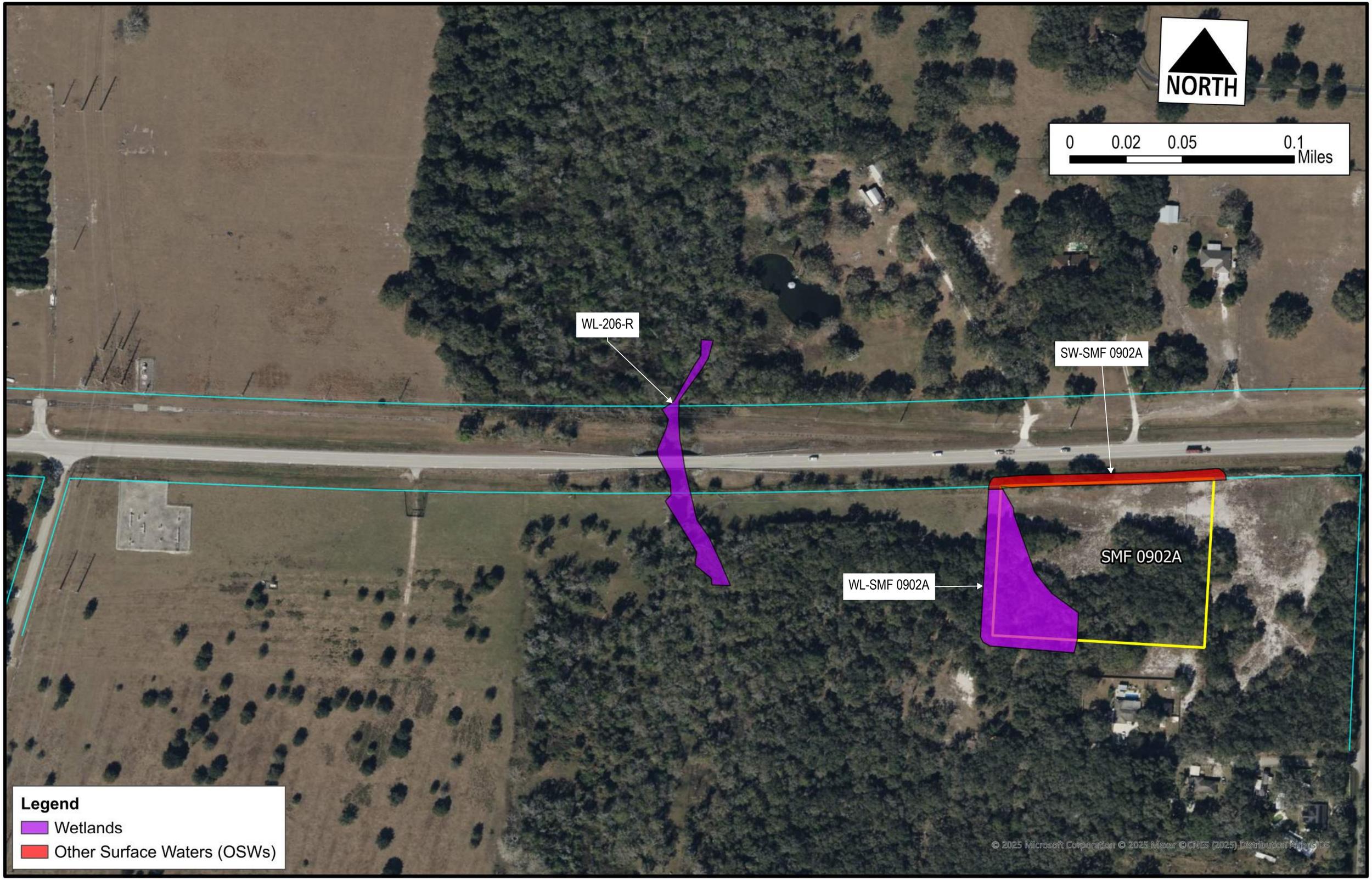
NORTH
0 0.02 0.05 0.1
Miles
WL-206-R
SW-SMF 0902A
SMF 0902A
WL-SMF 0902A
Legend
Wetlands
Other Surface Waters (OSWs)
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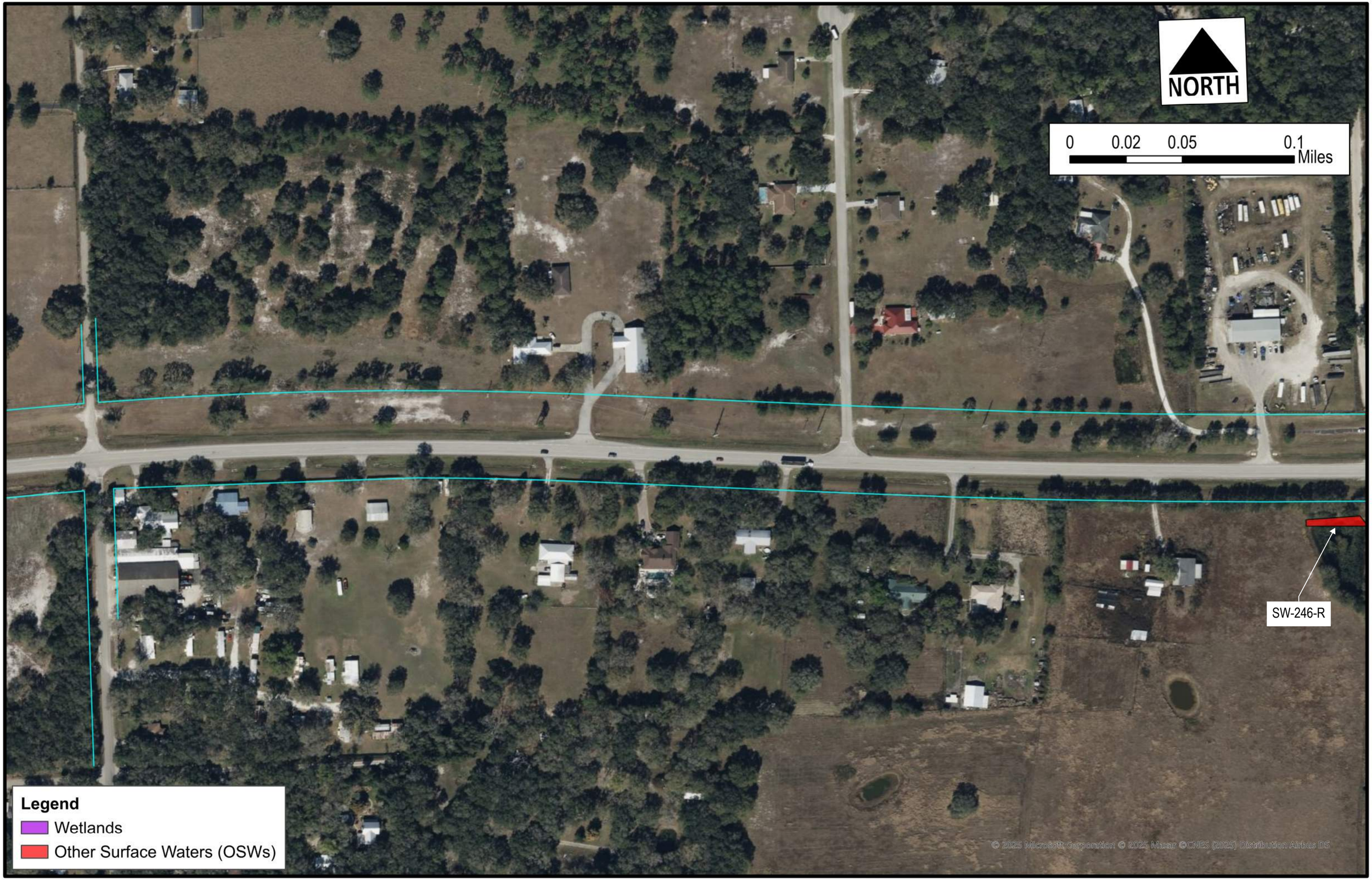
NORTH
0
0.02
0.05
0.1
Miles
SW-246-R
Legend
Wetlands
Other Surface Waters (OSWs)
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NORTH
0
0.02
0.05
0.1
Miles
SW-246-R
Legend
Wetlands
Other Surface Waters (OSWs)
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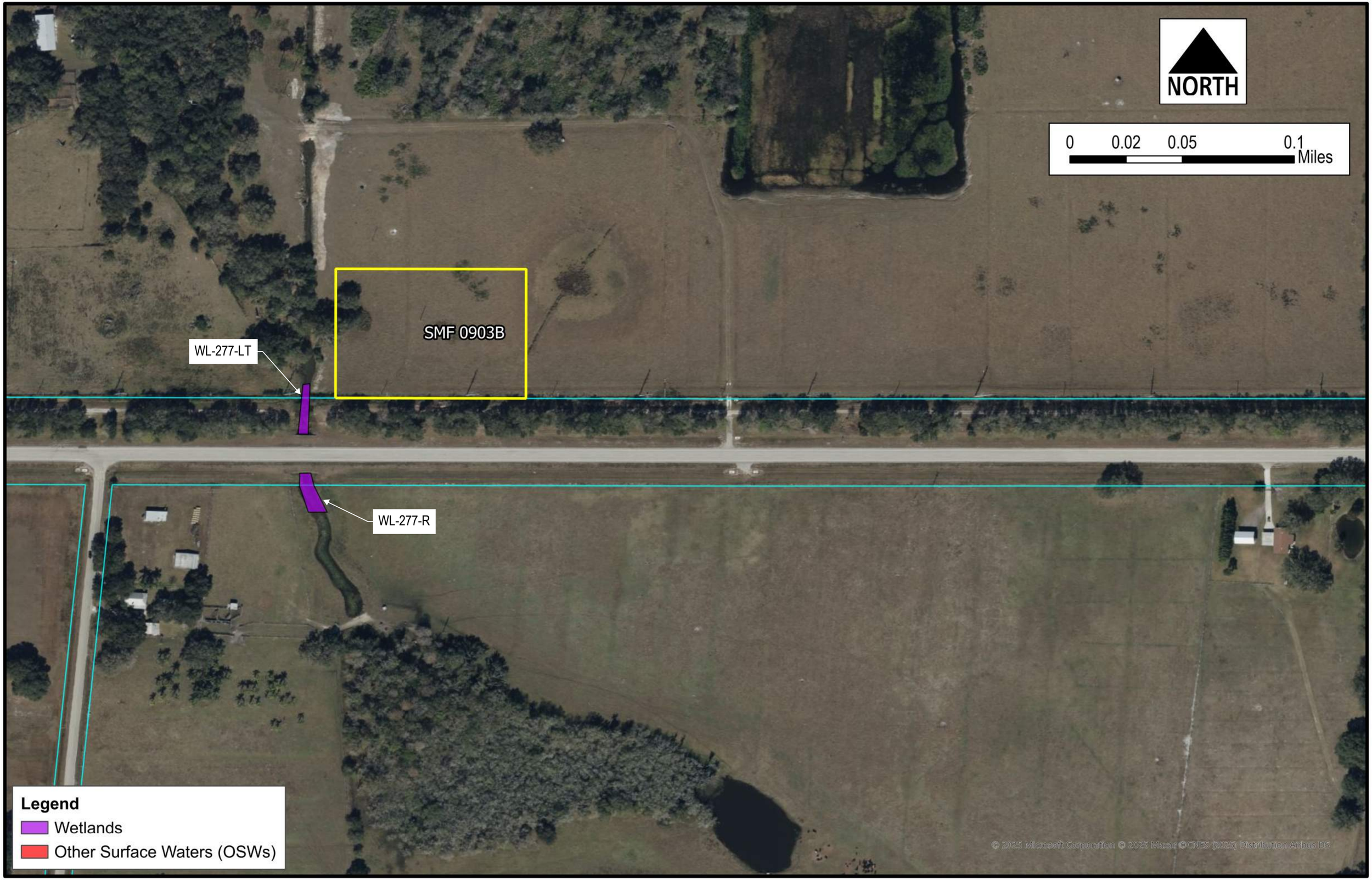
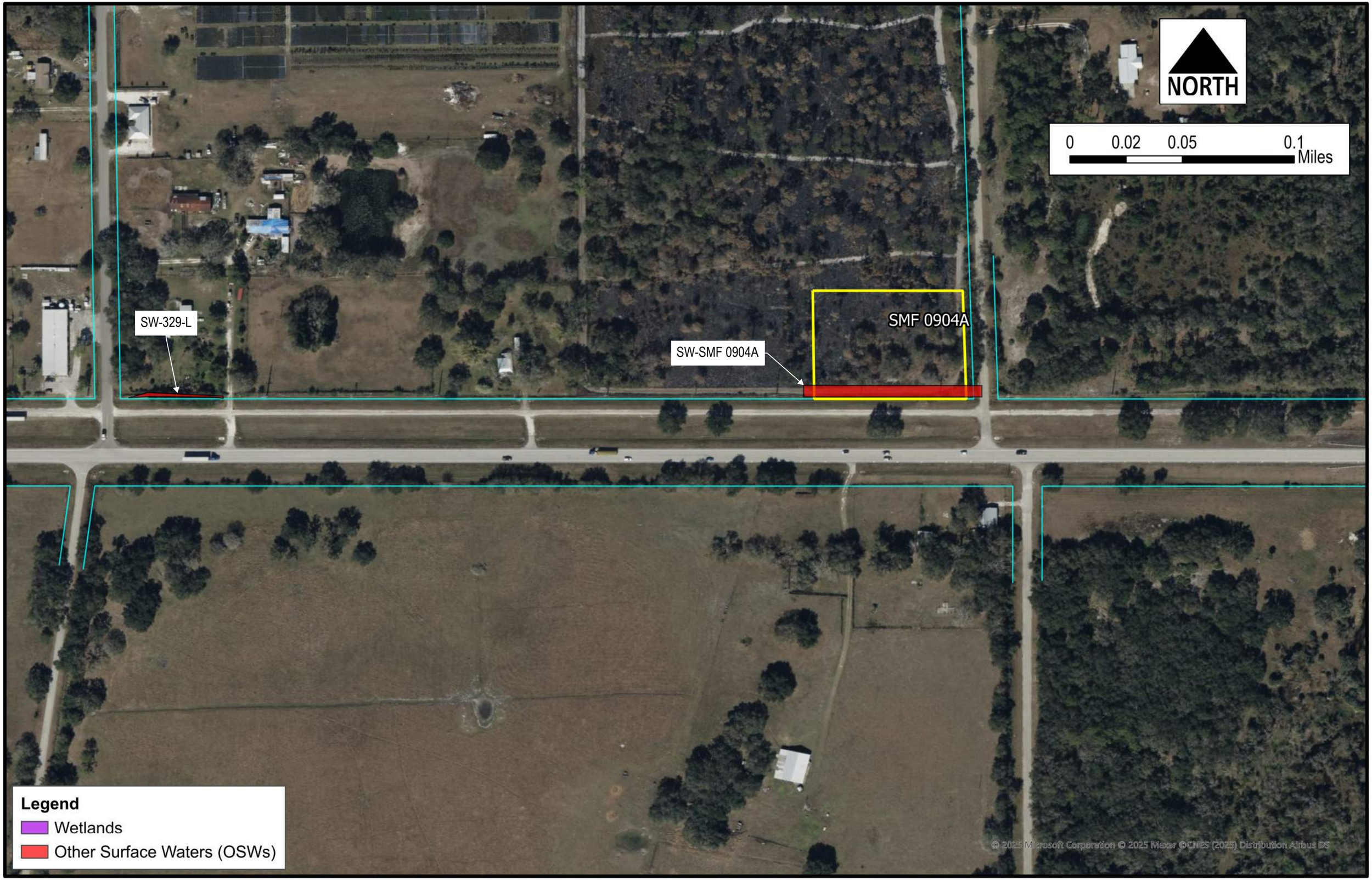

NORTH
0
0.02
0.05
0.1
Miles
SMF 0903B
WL-277-LT
WL-277-R
Legend
Wetlands
Other Surface Waters (OSWs)
© 2025 Microsoft Corporation © 2025 Maxar ©CNES (2025) Distribution Airbus DS

NORTH
0
0.02
0.05
0.1
Miles
WL-302-LT
WL-302-R
WL-316-R
Legend
Wetlands
Other Surface Waters (OSWs)
© 2025 Microsoft Corporation © 2025 Maxar ©CNES (2025) Distribution Airbus DS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0
0.02
0.05
0.1
Miles
SW-329-L
SW-SMF 0904A
SMF 0904A
Legend
Wetlands
Other Surface Waters (OSWs)
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NORTH
0
0.02
0.05
0.1
Miles
WL-354-L
Legend
Wetlands
Other Surface Waters (OSWs)
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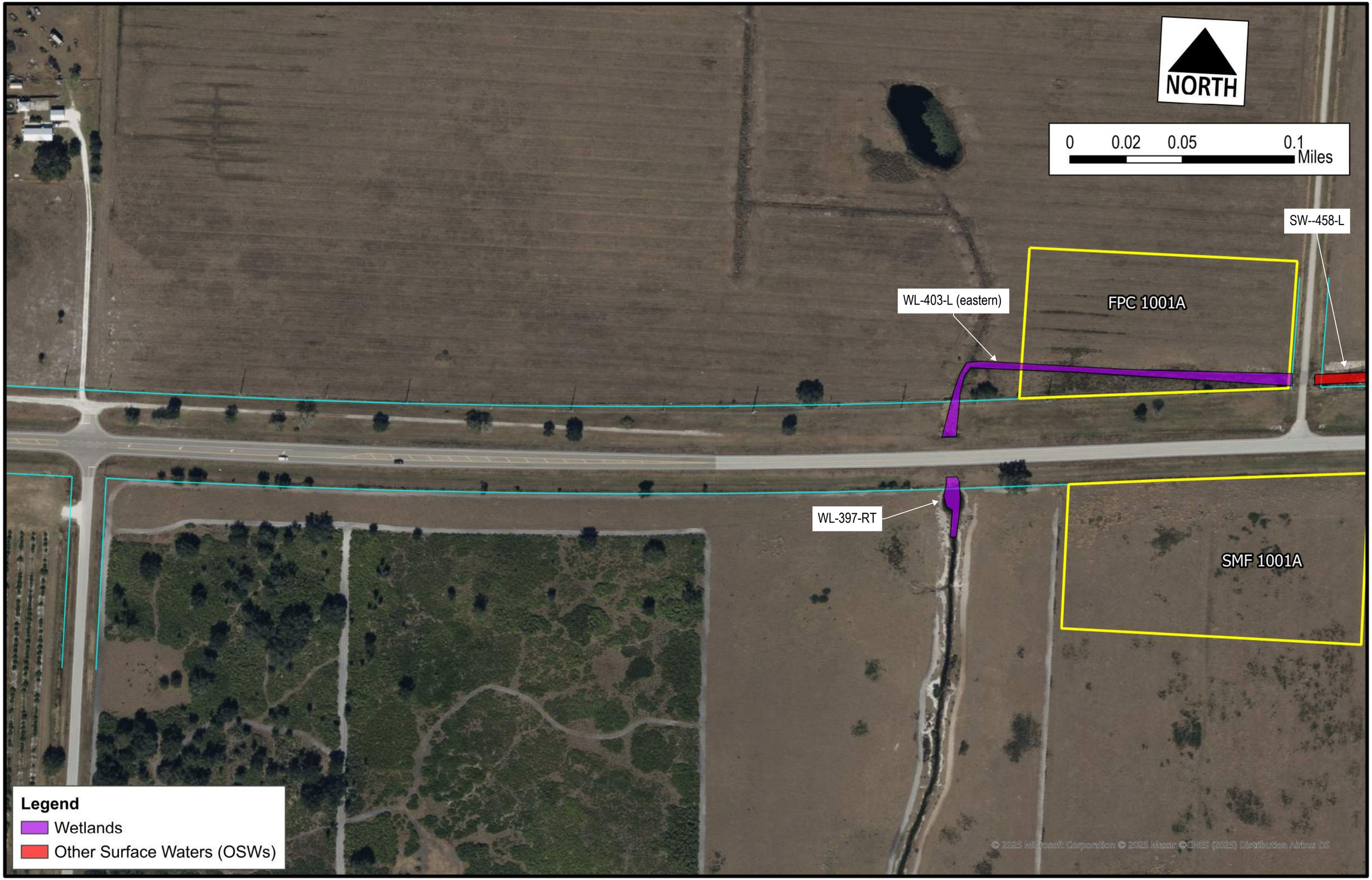
NORTH
0
0.02
0.05
0.1
Miles
SW--458-L
WL-403-L (eastern)
FPC 1001A
WL-397-RT
SMF 1001A
Legend
Wetlands
Other Surface Waters (OSWs)
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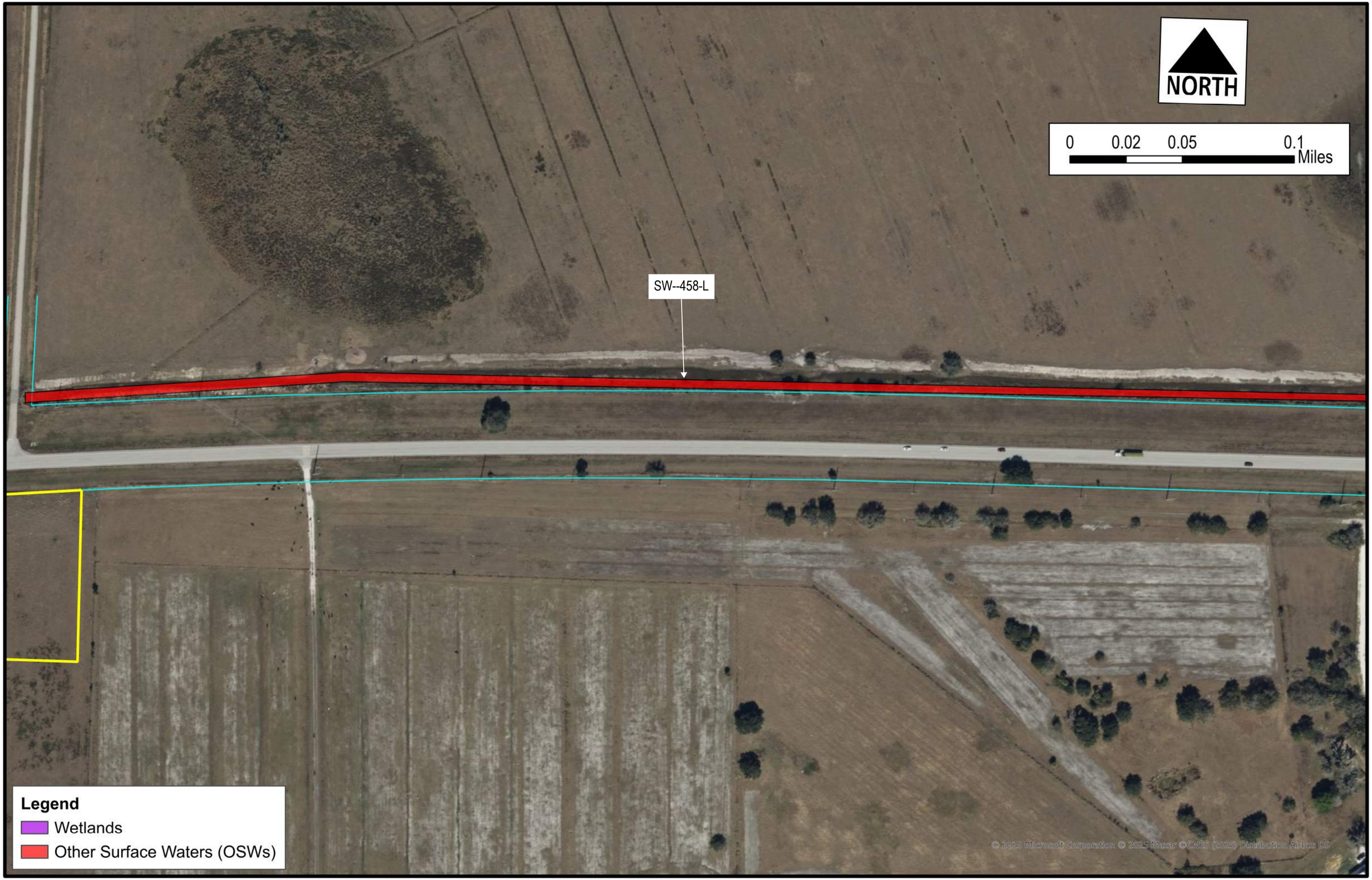
NORTH
0
0.02
0.05
0.1
Miles
SW--458-L
Legend
Wetlands
Other Surface Waters (OSWs)
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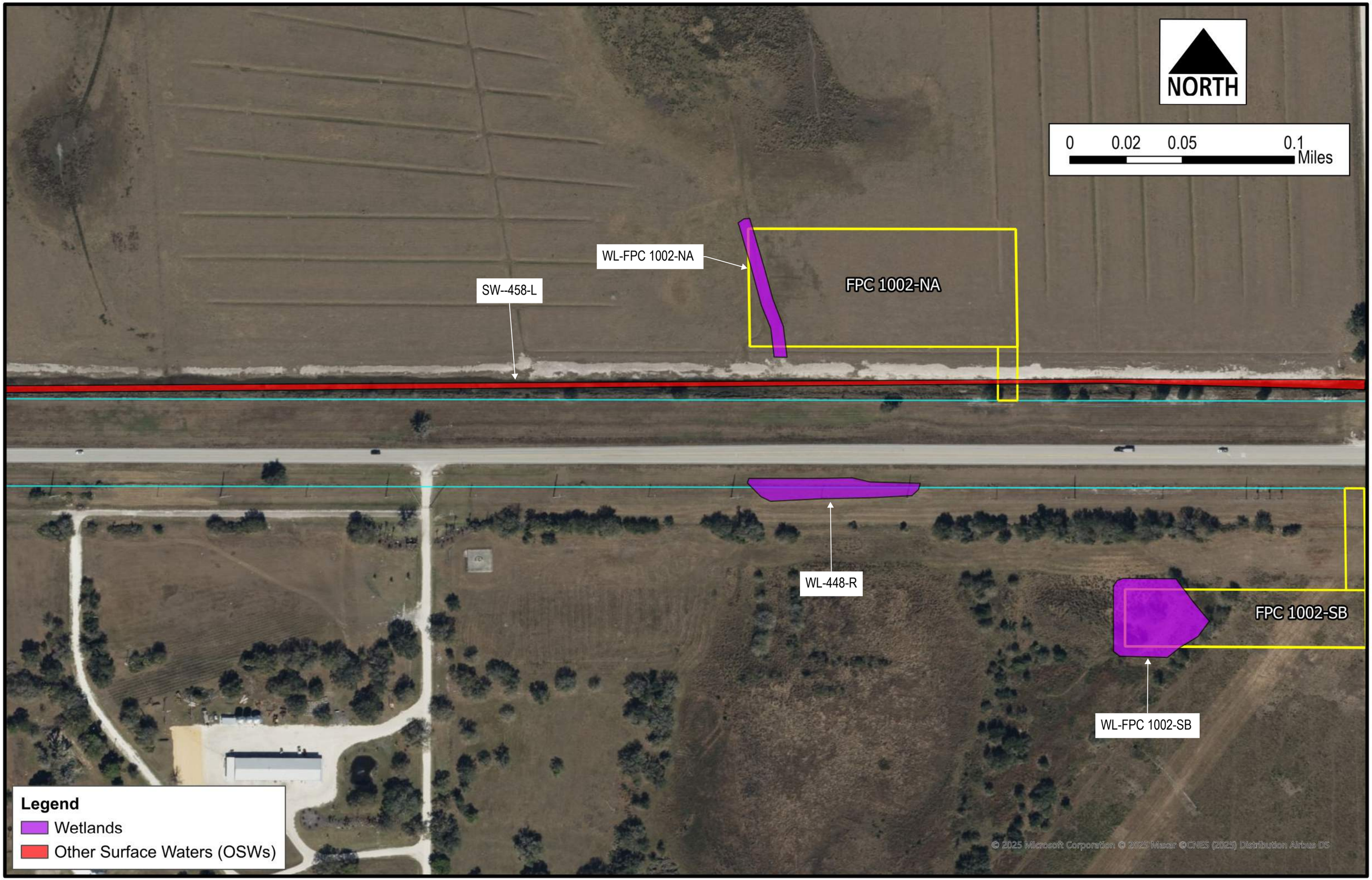
NORTH
0
0.02
0.05
0.1
Miles
WL-FPC 1002-NA
FPC 1002-NA
SW--458-L
WL-448-R
FPC 1002-SB
WL-FPC 1002-SB
Legend
Wetlands
Other Surface Waters (OSWs)
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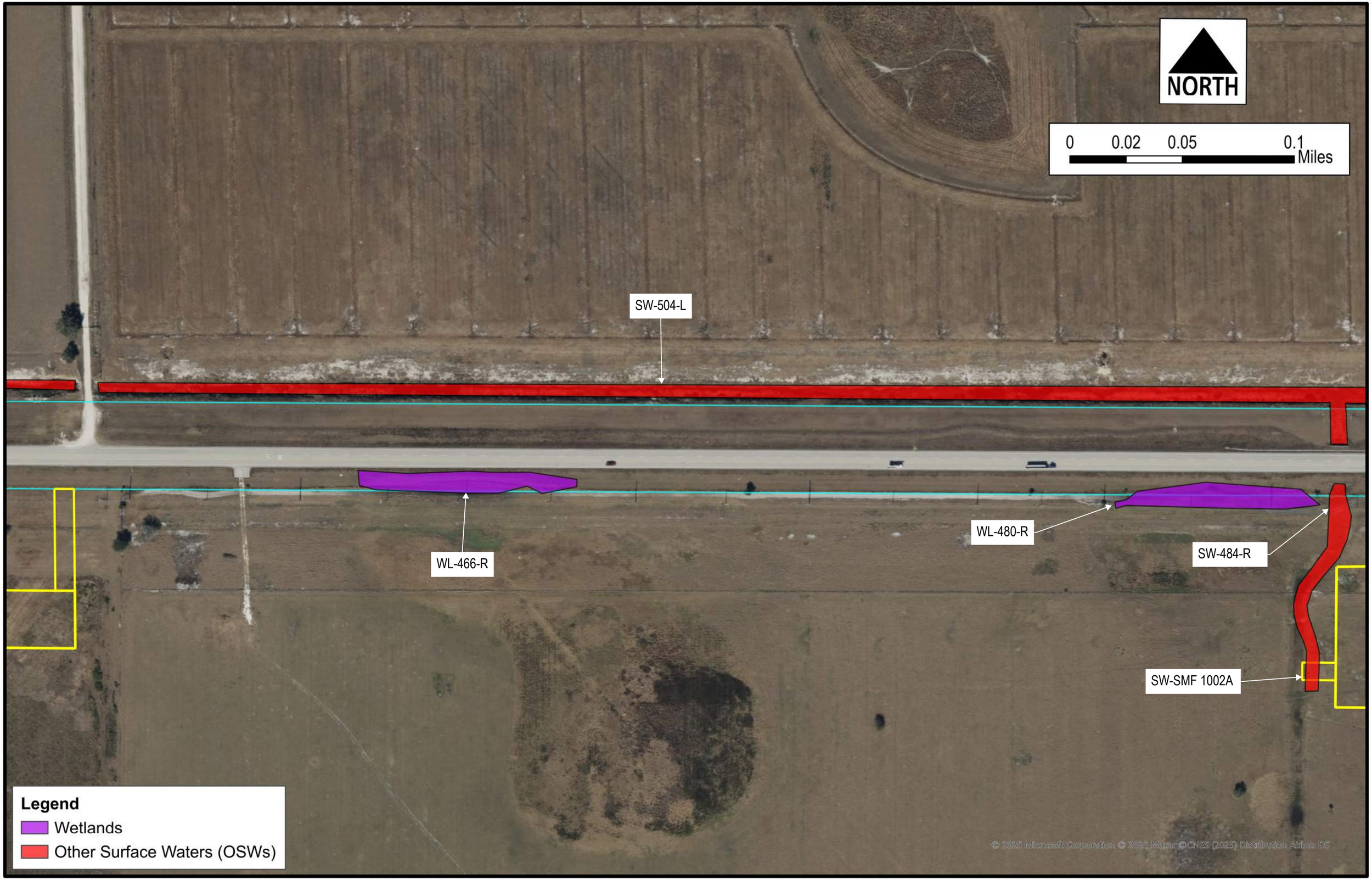
NORTH
0
0.02
0.05
0.1
Miles
SW-504-L
WL-466-R
WL-480-R
SW-484-R
SW-SMF 1002A
Legend
Wetlands
Other Surface Waters (OSWs)
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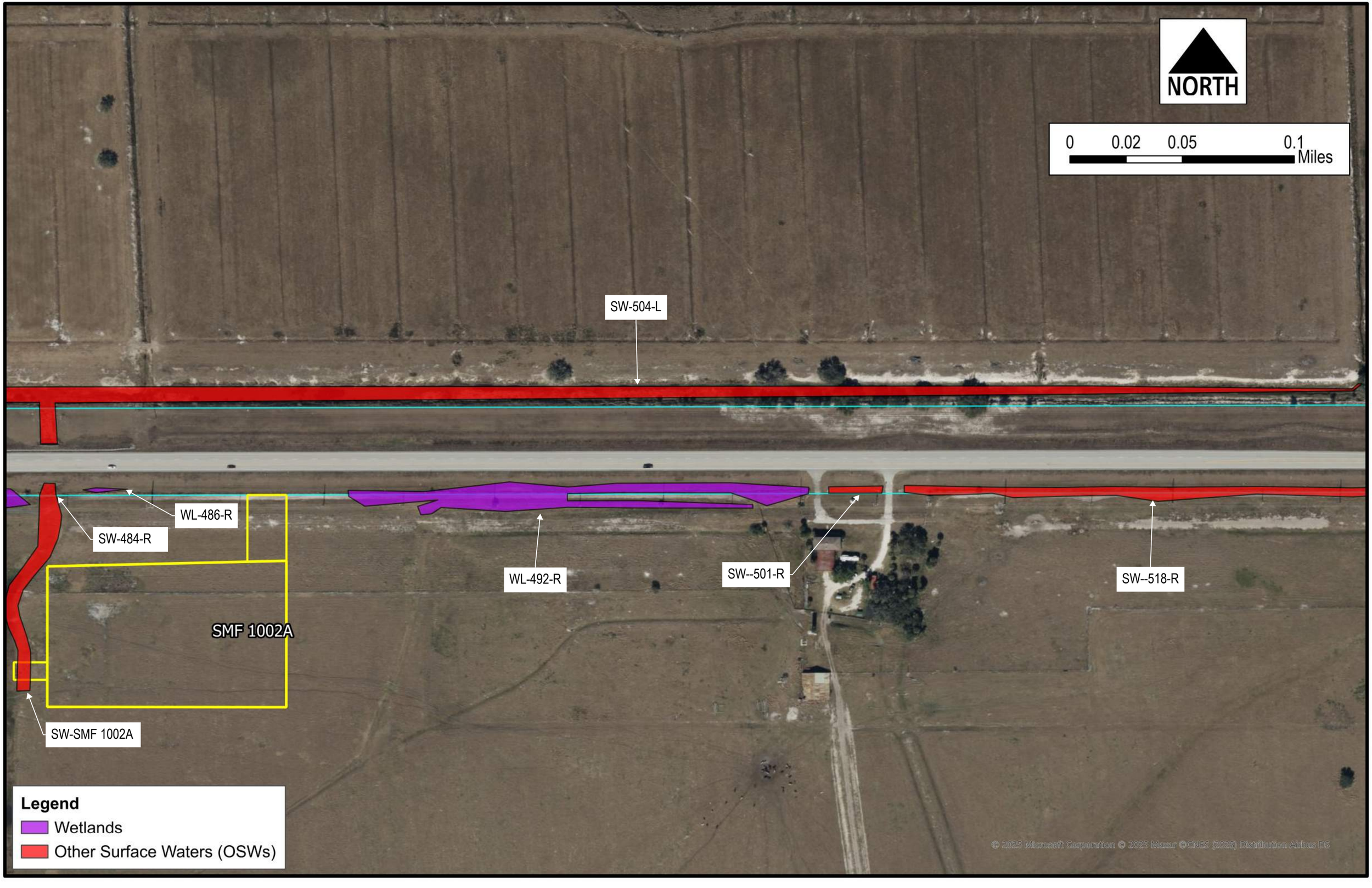
NORTH
0 0.02 0.05 0.1
Miles
SW-504-L
WL-486-R
SW-484-R
WL-492-R
SW--501-R
SW--518-R
SMF 1002A
SW-SMF 1002A
Legend
Wetlands
Other Surface Waters (OSWs)
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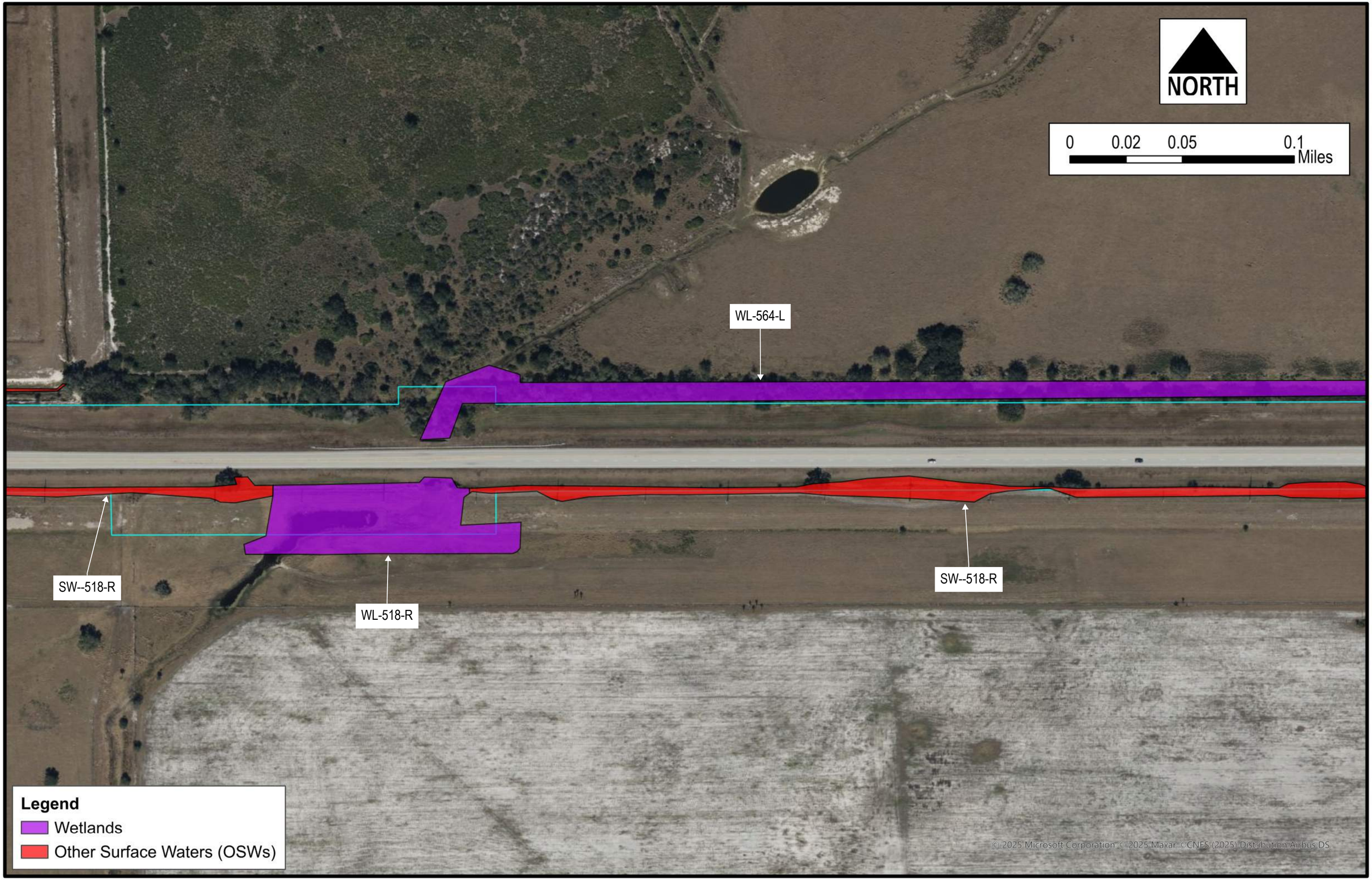
NORTH
0
0.02
0.05
0.1
Miles
WL-564-L
SW--518-R
WL-518-R
SW--518-R
Legend
Wetlands
Other Surface Waters (OSWs)
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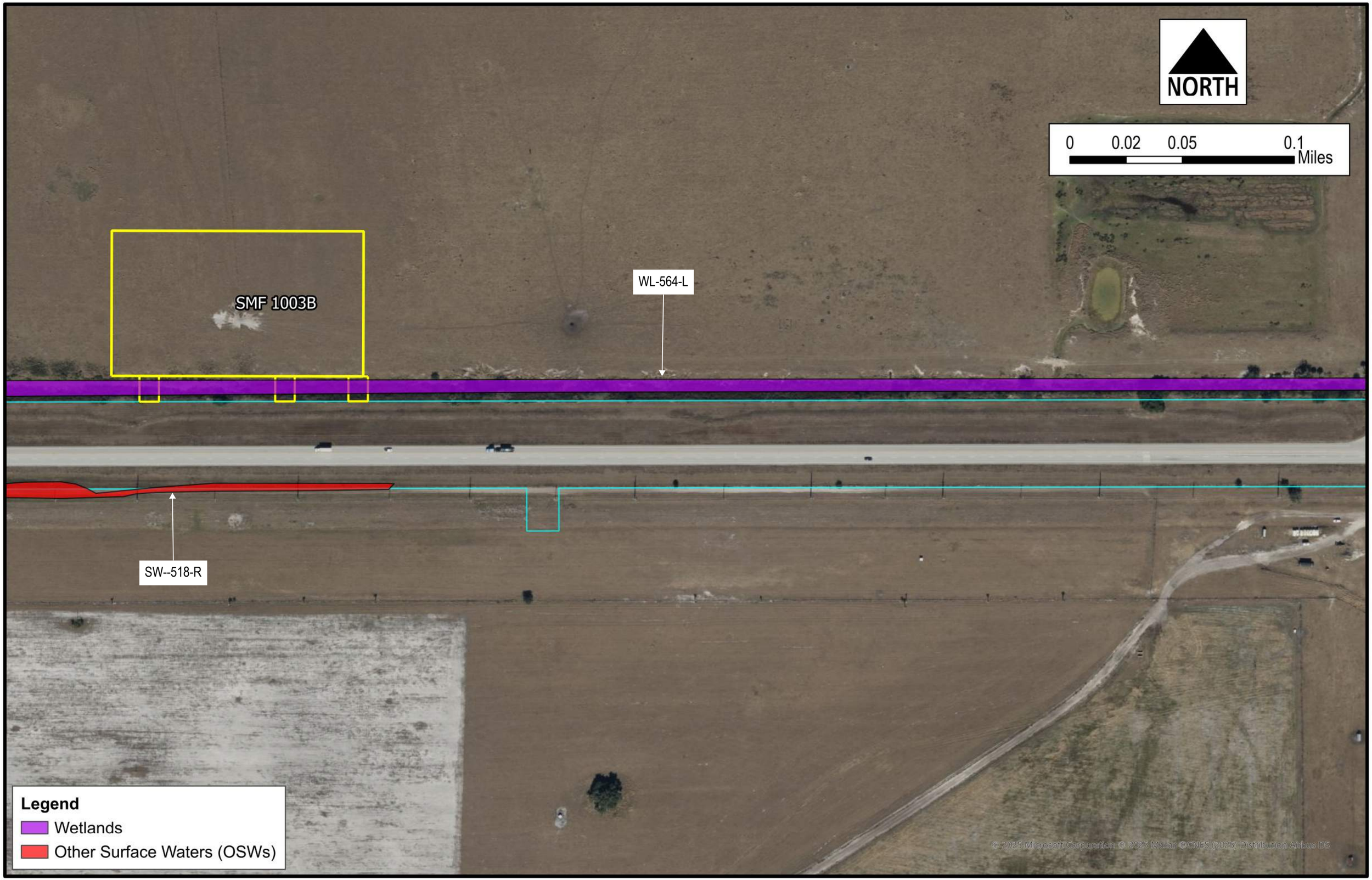
NORTH
0
0.02
0.05
0.1
Miles
SMF 1003B
WL-564-L
SW--518-R
Legend
Wetlands
Other Surface Waters (OSWs)
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NORTH
0
0.02
0.05
0.1
Miles
WL-564-L
SW-565-1
SW-572-L
WL-617-L
WL-585-R
WL-584-R
WL-588-R
WL-589-R
Legend
Wetlands
Other Surface Waters (OSWs)
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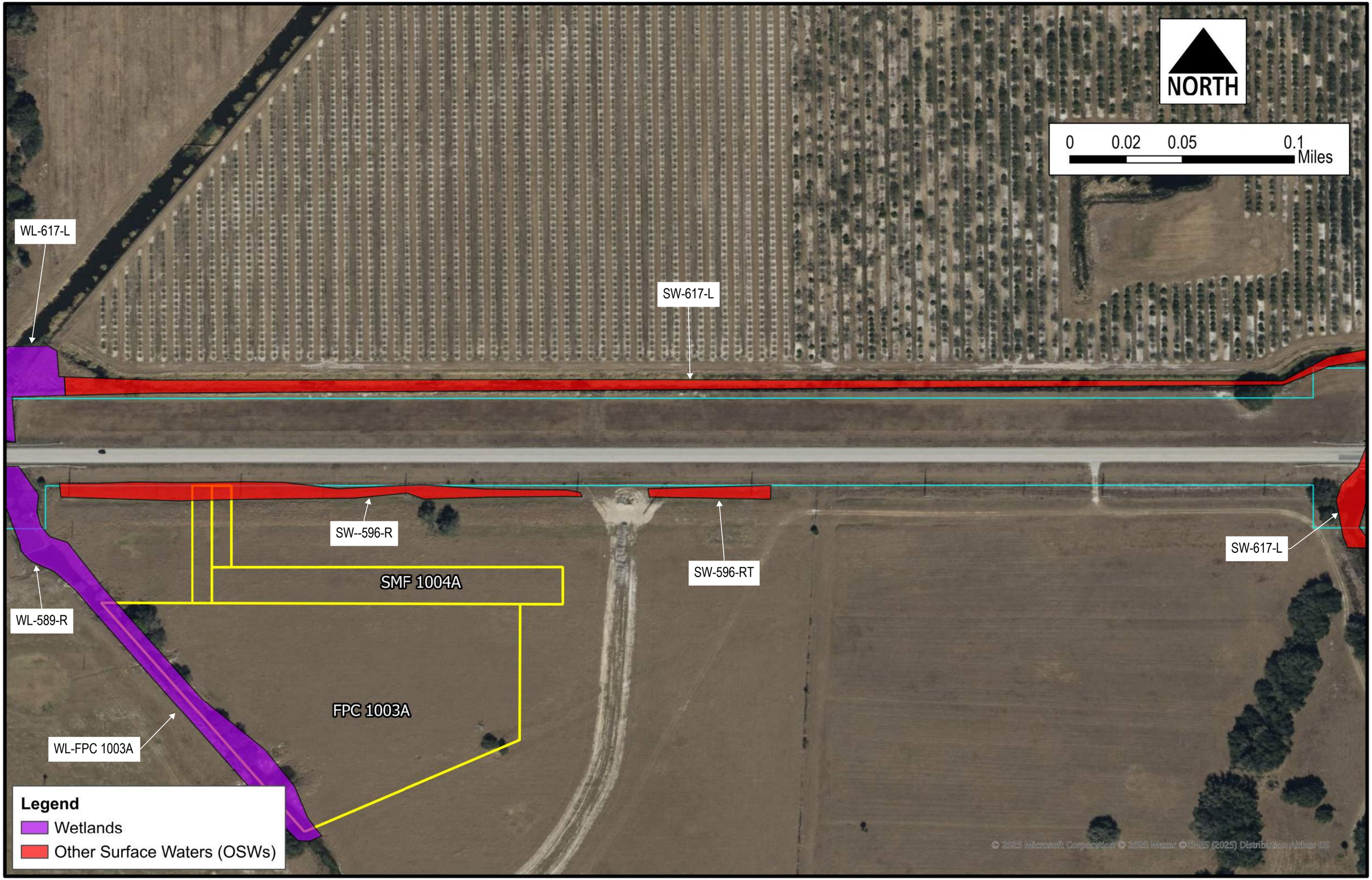
NORTH
0
0.02
0.05
0.1
Miles
WL-617-L
SW-617-L
SW--596-R
SW-596-RT
SW-617-L
SMF 1004A
WL-589-R
FPC 1003A
WL-FPC 1003A
Legend
Wetlands
Other Surface Waters (OSWs)
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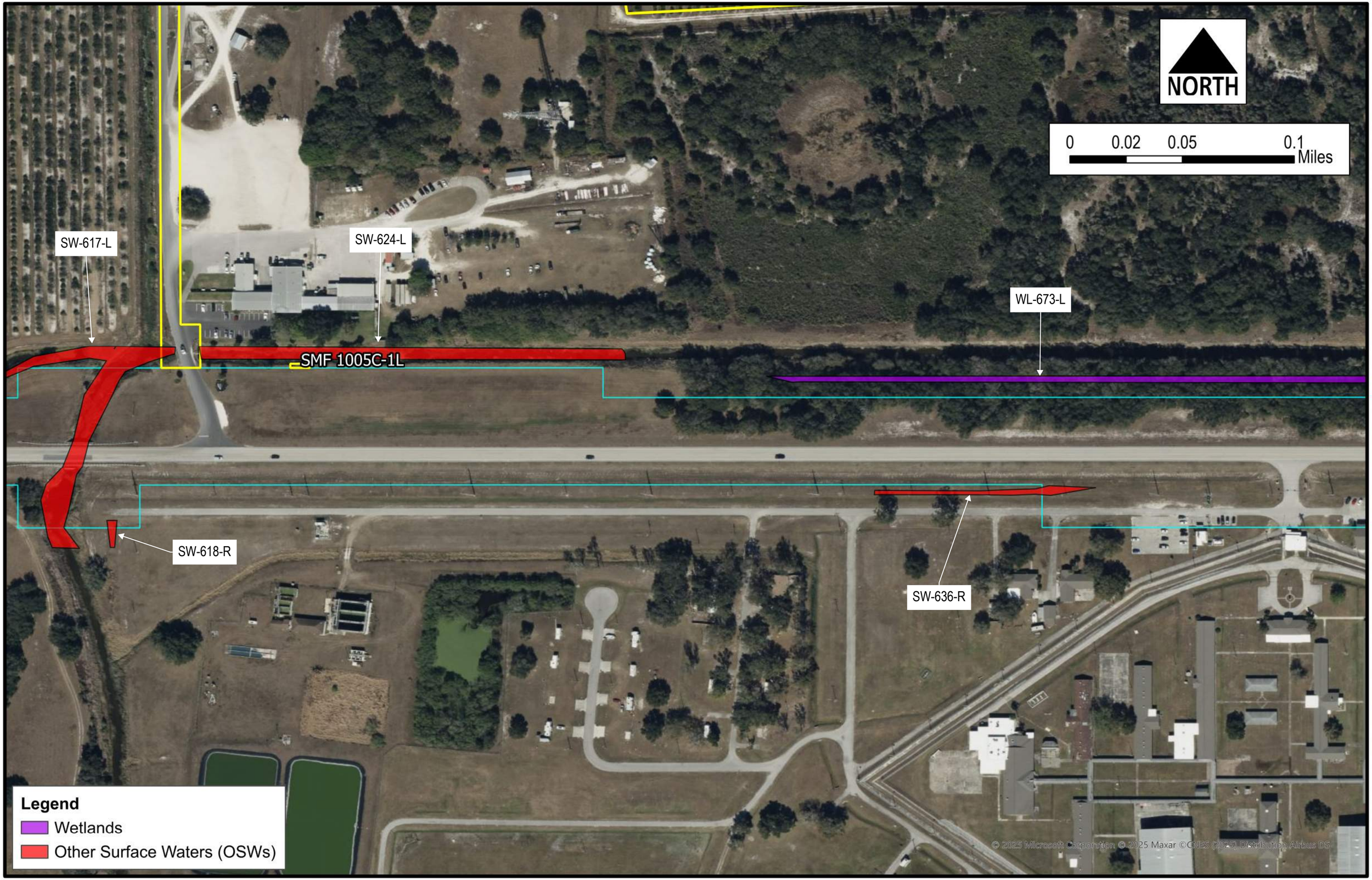
NORTH
0
0.02
0.05
0.1
Miles
SW-617-L
SW-624-L
WL-673-L
SMF 1005C-1L
SW-618-R
SW-636-R
Legend
Wetlands
Other Surface Waters (OSWs)
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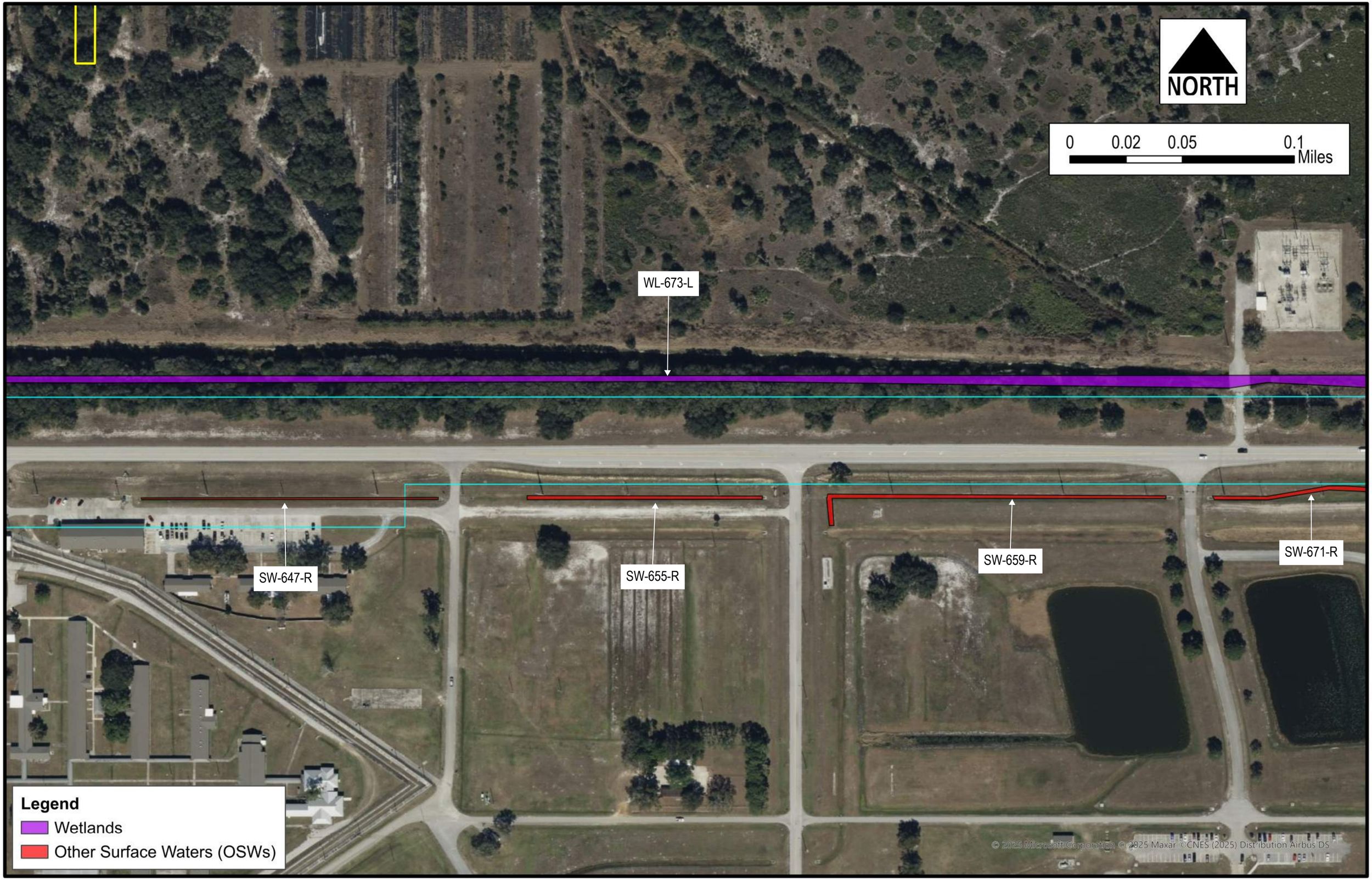
NORTH
0 0.02 0.05 0.1
Miles
WL-673-L
SW-647-R
SW-655-R
SW-659-R
SW-671-R
Legend
Wetlands
Other Surface Waters (OSWs)
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NORTH
0 0.02 0.05 0.1
Miles
WL-673-L
SW-673-L
SW-SMF 0904A
SW-673-R
SW-672-R
Legend
Wetlands
Other Surface Waters (OSWs)
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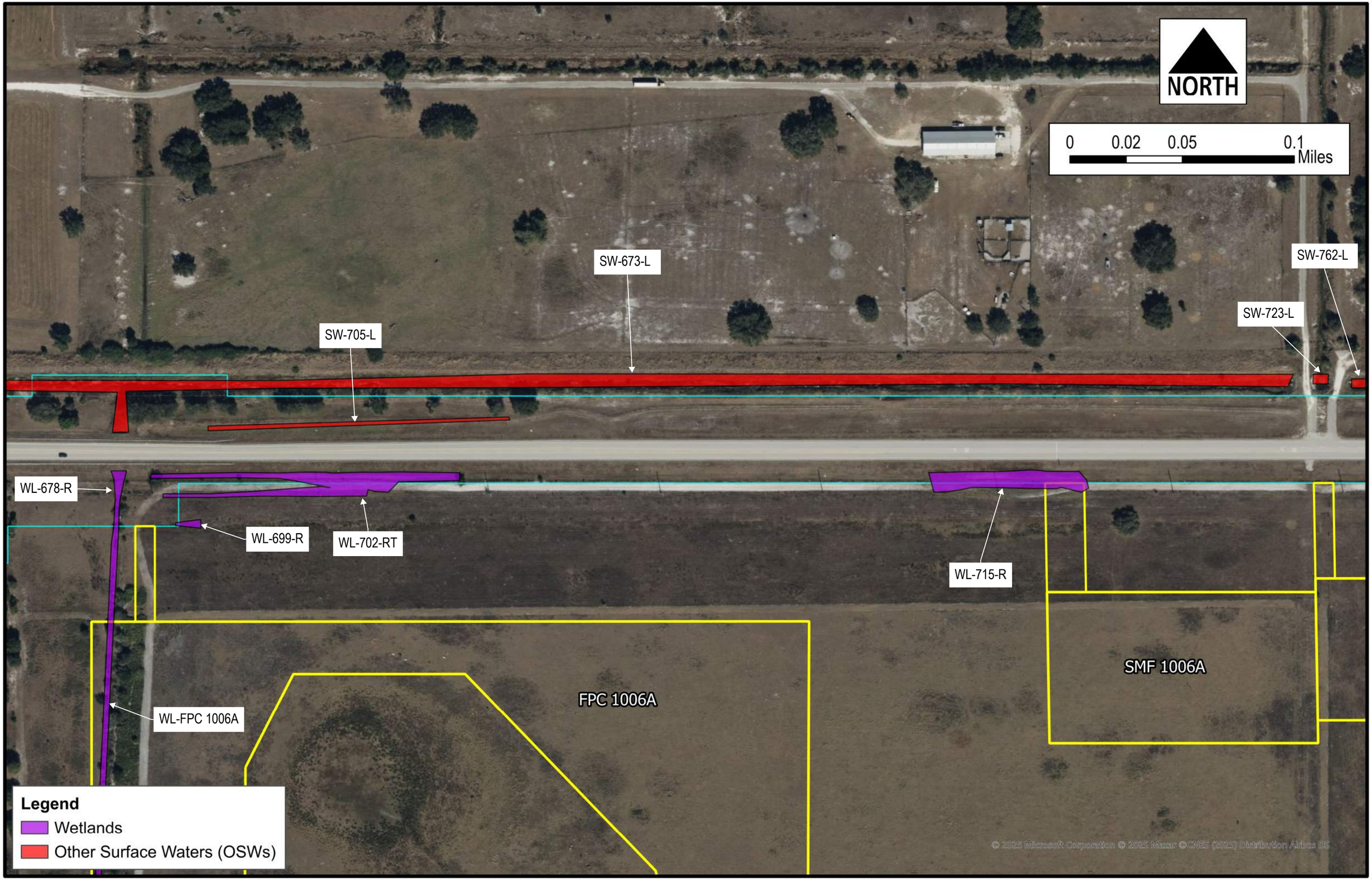
NORTH
0 0.02 0.05 0.1
Miles
SW-673-L
SW-762-L
SW-723-L
SW-705-L
WL-678-R
WL-699-R
WL-702-RT
WL-715-R
FPC 1006A
SMF 1006A
WL-FPC 1006A
Legend
Wetlands
Other Surface Waters (OSWs)
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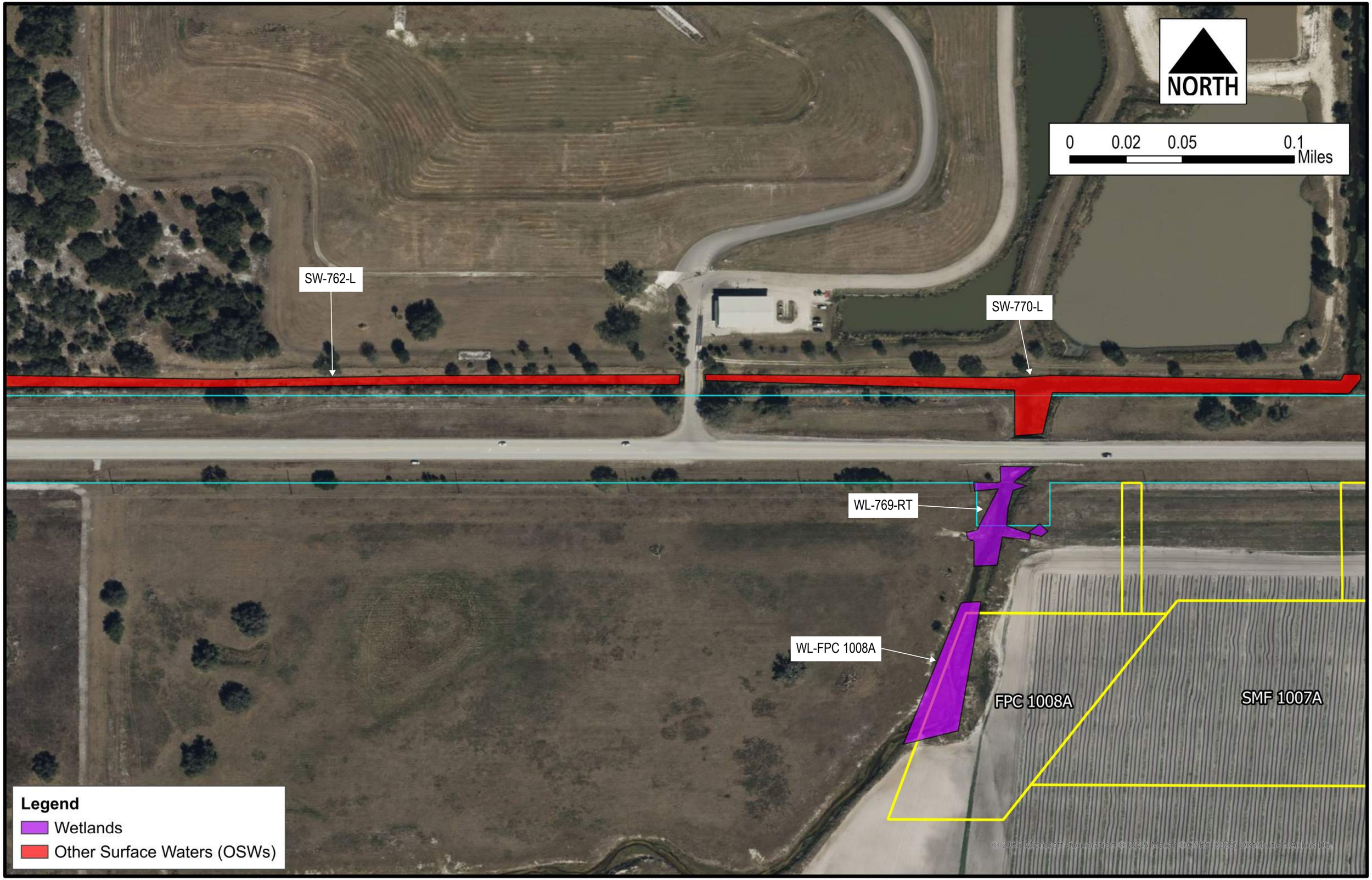
NORTH
0
0.02
0.05
0.1
Miles
SW-723-L
SW-762-L
WL-729-R
WL-730-RT
WL-FPC 1007C
FPC 1007C
Legend
Wetlands
Other Surface Waters (OSWs)
© 2025 Microsoft Corporation © 2025 Maxar ©CNES (2025) Distribution Airbus DS


NORTH
0 0.02 0.05 0.1
Miles
SW-762-L
SW-770-L
WL-769-RT
WL-FPC 1008A
FPC 1008A
SMF 1007A
Legend
Wetlands
Other Surface Waters (OSWs)
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NORTH
0
0.02
0.05
0.1
Miles
SW-770-L
SW--807-L
Legend
Wetlands
Other Surface Waters (OSWs)
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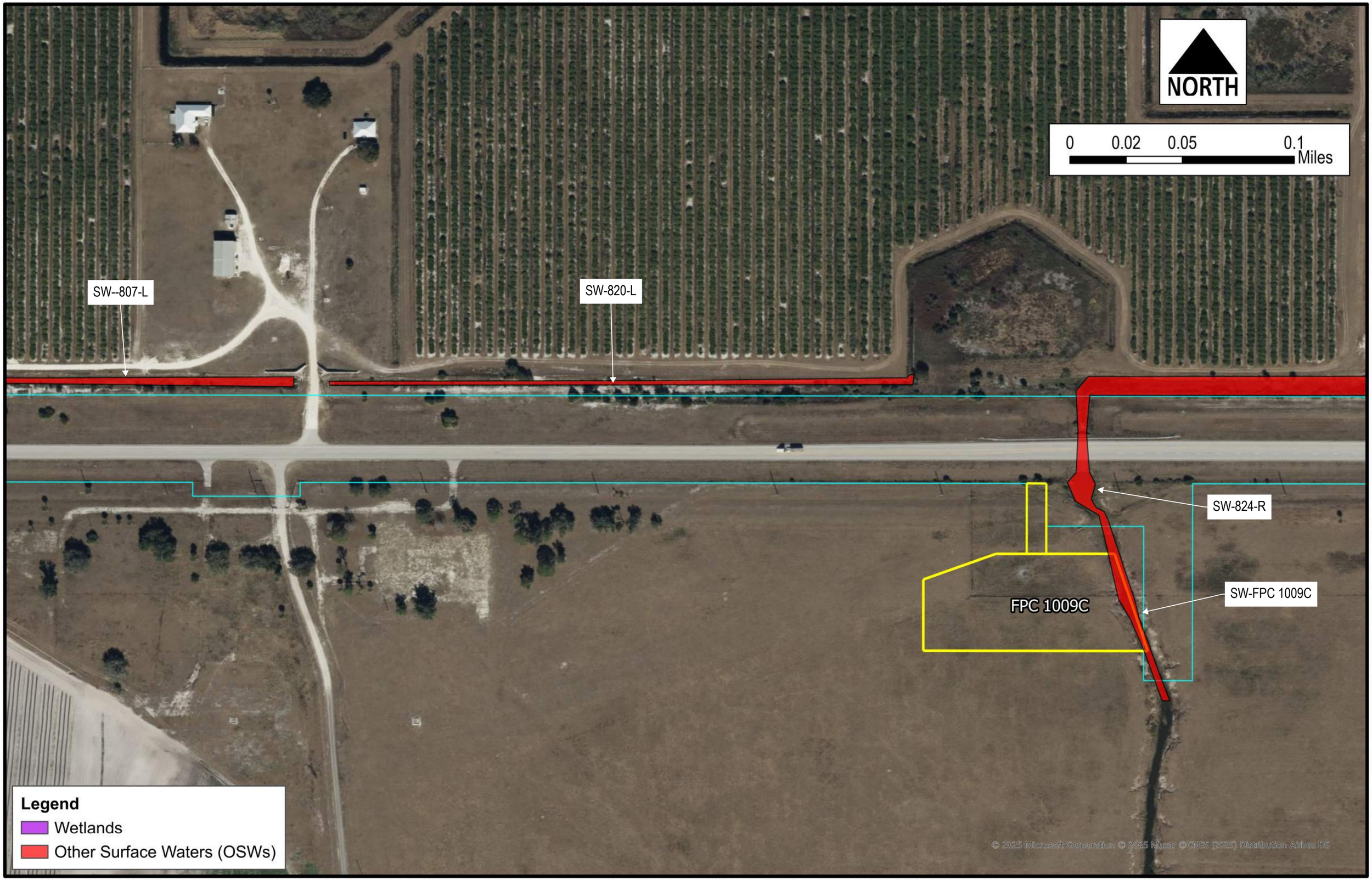
NORTH
0
0.02
0.05
0.1
Miles
SW--807-L
SW-820-L
SW-824-R
SW-FPC 1009C
FPC 1009C
Legend
Wetlands
Other Surface Waters (OSWs)
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NORTH
0
0.02
0.05
0.1
Miles
SW-824-R
Legend
Wetlands
Other Surface Waters (OSWs)
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NORTH
0
0.02
0.05
0.1
Miles
SW-824-R
SW-859-RT
SW-880-R
Legend
Wetlands
Other Surface Waters (OSWs)
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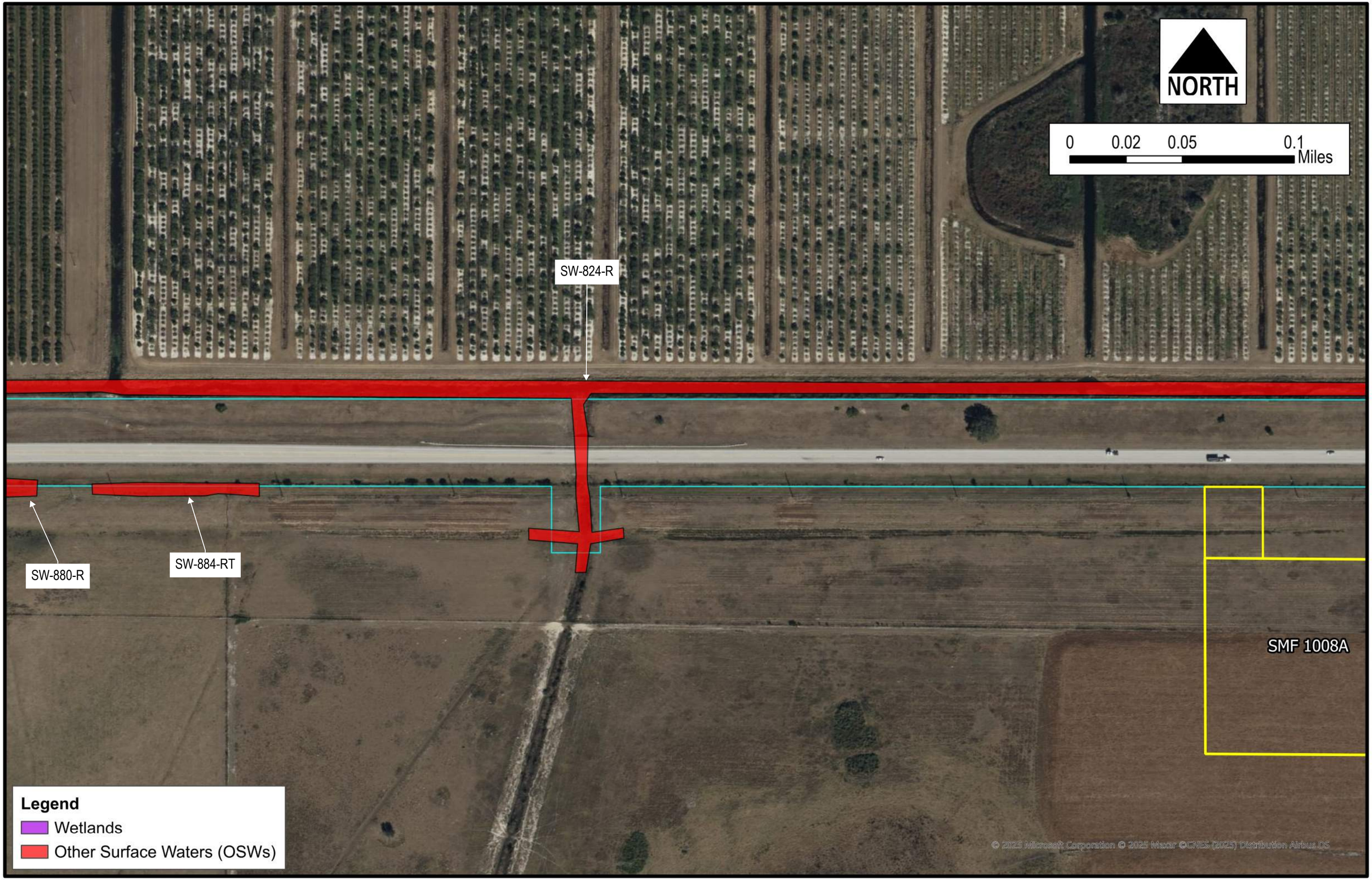
NORTH
0 0.02 0.05 0.1
Miles
SW-824-R
SW-880-R
SW-884-RT
SMF 1008A
Legend
Wetlands
Other Surface Waters (OSWs)
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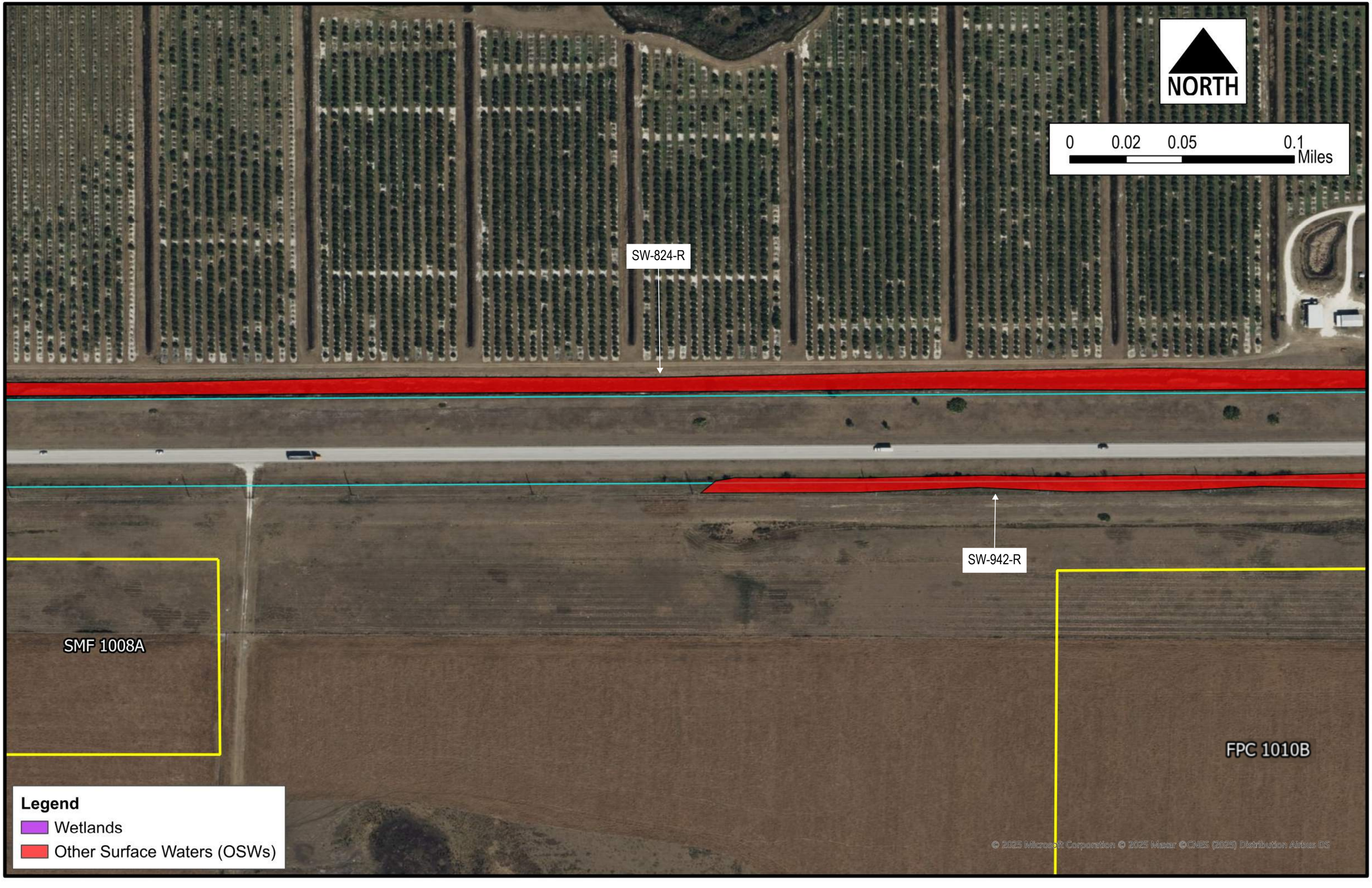
NORTH
0 0.02 0.05 0.1
Miles
SW-824-R
SW-942-R
SMF 1008A
FPC 1010B
Legend
Wetlands
Other Surface Waters (OSWs)
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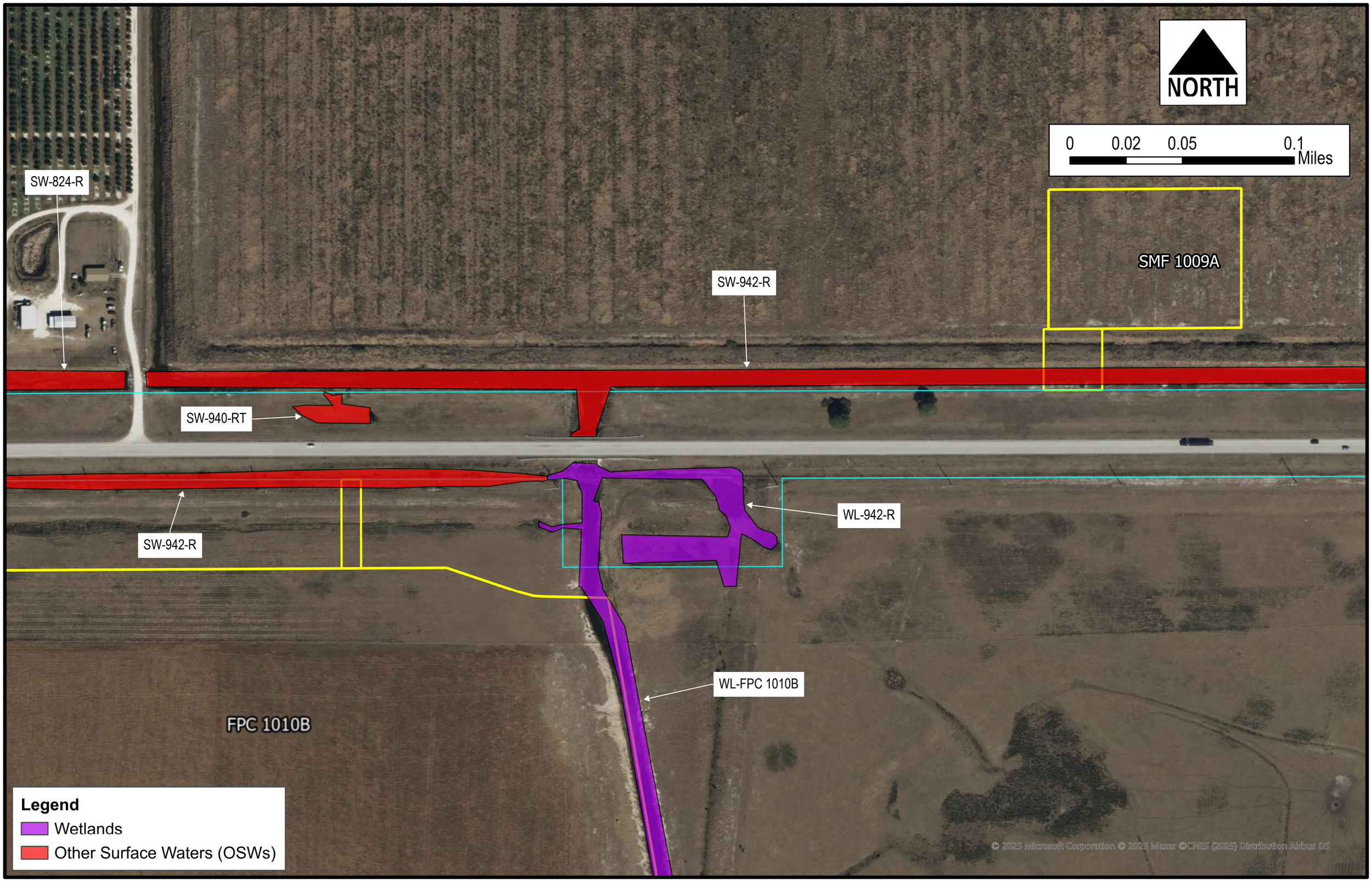
NORTH
0
0.02
0.05
0.1
Miles
SW-824-R
SW-942-R
SMF 1009A
SW-940-RT
SW-942-R
WL-942-R
WL-FPC 1010B
FPC 1010B
Legend
Wetlands
Other Surface Waters (OSWs)
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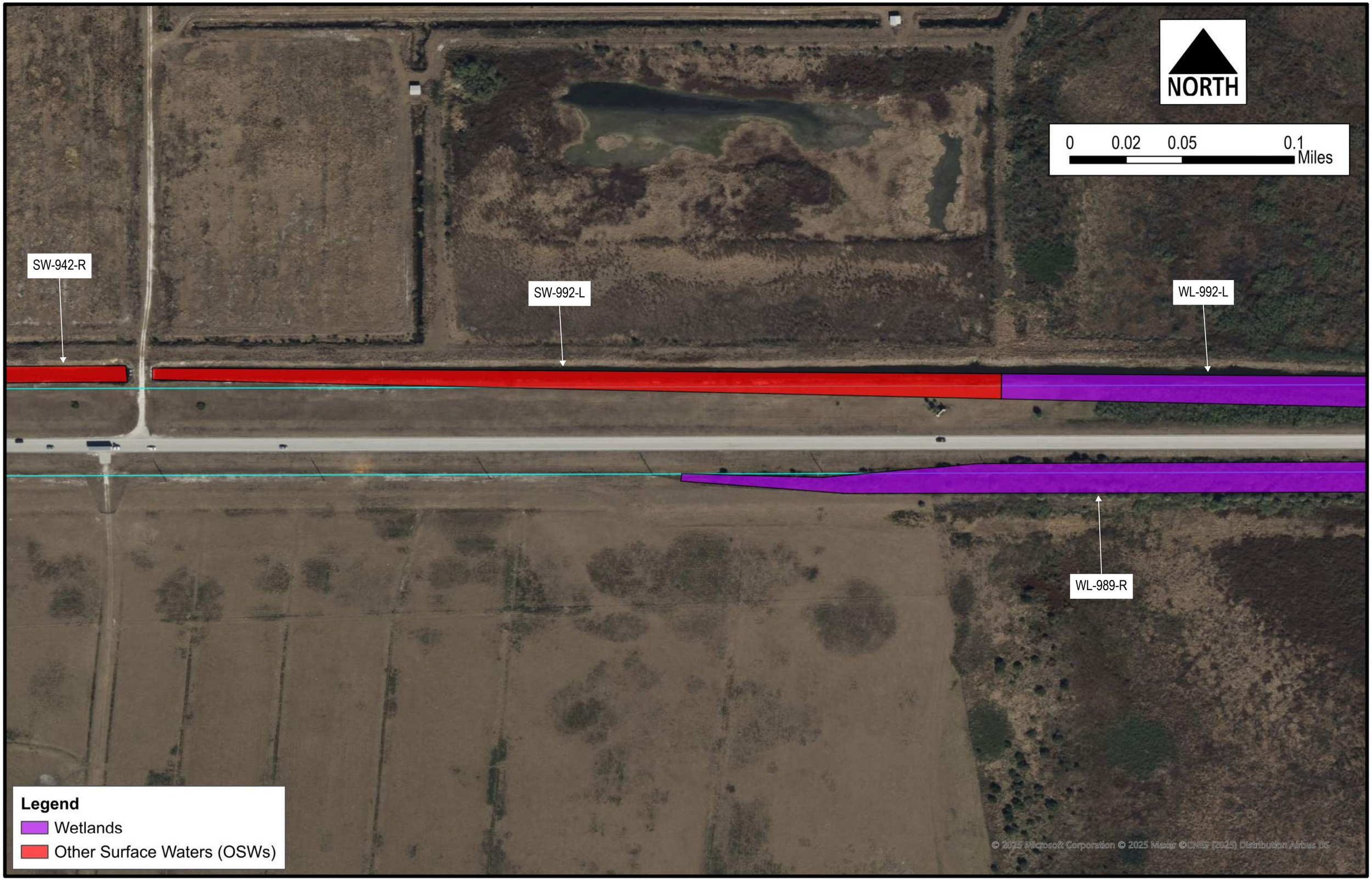
NORTH
0
0.02
0.05
0.1
Miles
SW-942-R
SW-992-L
WL-992-L
WL-989-R
Legend
Wetlands
Other Surface Waters (OSWs)
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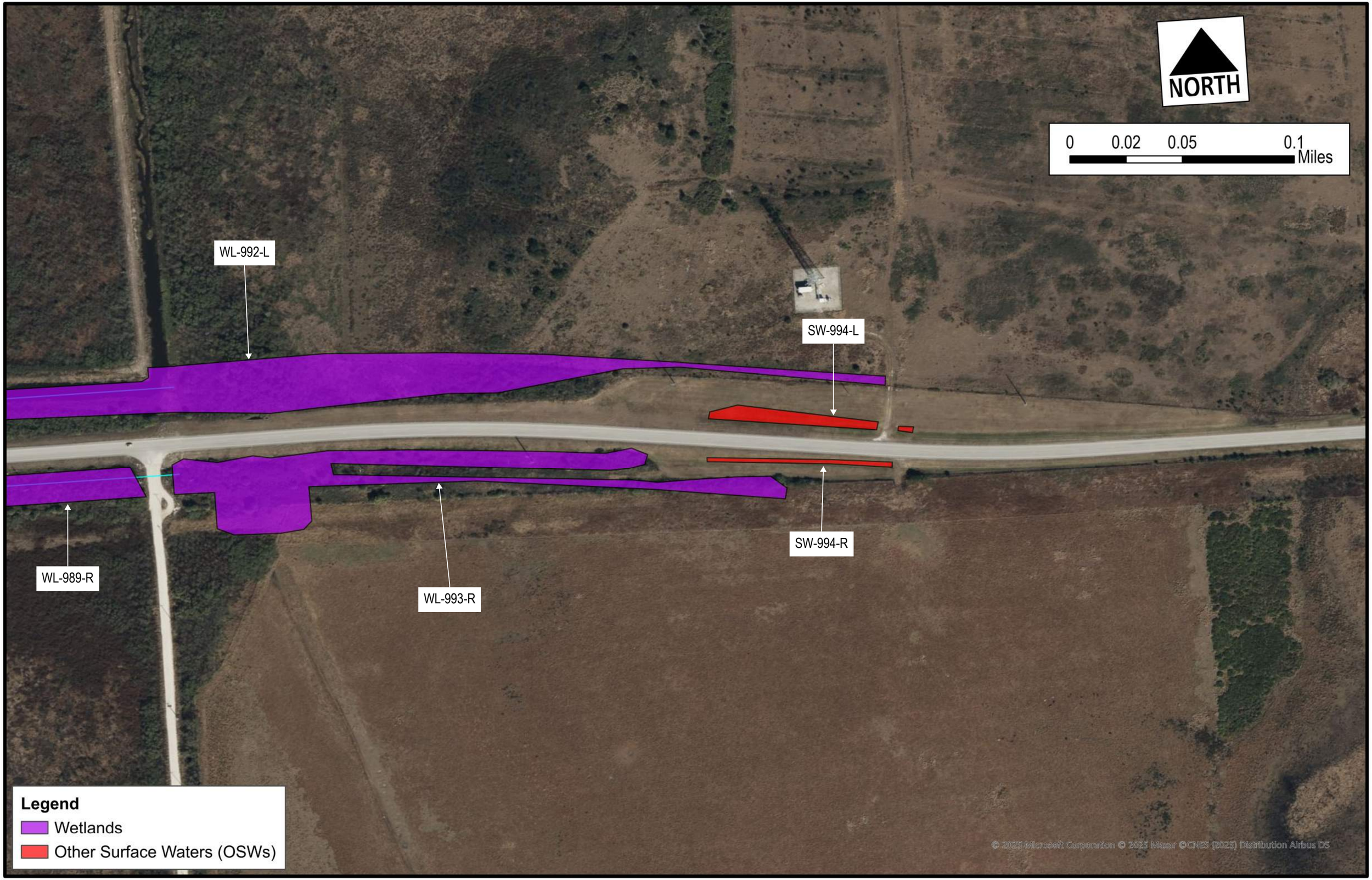
NORTH
0
0.02
0.05
0.1
Miles
WL-992-L
SW-994-L
WL-989-R
WL-993-R
SW-994-R
Legend
Wetlands
Other Surface Waters (OSWs)
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APPENDIX O

Wetland Photos

W5 - facing North towards SR 70

W10 – facing West

W11 – facing North

W17 – facing South

W21– facing North

W24 – facing South connected to wetland FPC 1007A

W30 – facing West, connected to wetland FPC 1009B

W35 – facing Southwest

APPENDIX P

UMAM Datasheets

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-114-LT, WL-115-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetland (FDOT FLUCFCS)	Permanent Impact	0.027 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

On the north and south side of SR 70. The north and south sides are connected by a culvert. This wetland is located within a 100 year floodplain.

Assessment area description

Classified as a Riverine (R5UBFx) according to the USFWS' NWI and as Residential, Medium Density (two-five dwelling units per acre (120) and Commercial and Services (140) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional
Surrounded by residential development on the north side and commercial services on the south side.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	July 24, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-114-LT, WL-115-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	Katherine Lawlor, James Fine. and Liliana Sikes	July 24, 2024

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 with: 0	Wetland is on the north and south side of SR 70. The north and south side is connected by a culvert. This wetland is located within a 100 year floodplain. There are no hydric soils mapped within this wetland. Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by developed areas (residential and commercial) with moderate-poor connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from residential yards that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 3 with: 0	Field Verified NWI Classification - Riverine (R5UBFx) Field Verified FLUCFCs - Vegetated non-forested wetlands (640) Field observations include slow moving water that flows within the culvert underneath SR 70. The wetland vegetation was dominated by invasive herbaceous vegetation such as taro (*Colocasia esculenta* FISC Cat 1) and Peruvian primose willow (*Ludwigia peruviana* FISC Cat 1) along the shoreline. Other vegetation noted includes pickerelweed (Pontedaria cordata). Little emergent or benthic vegetation present.	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres = 0.0081

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-114-LT, WL-115-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetland (FDOT FLUCFCS)	Secondary Impact	0.032 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the north and south side of SR 70. The north and south sides are connected by a culvert. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Riverine (R5UBFx) according to the USFWS' NWI and as Residential, Medium Density (two-five dwelling units per acre (120) and Commercial and Services (140) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional
Wetland is surrounded by residential development on the north side and commercial services on the south side.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	July 24, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-114-LT, WL-115-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	Katherine Lawlor, James Fine. and Liliana Sikes	July 24, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Wetland is on the north and south side of SR 70. The north and south side is connected by a culvert. This wetland is located within a 100 year floodplain. There are no hydric soils mapped within this wetland. Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by developed areas (residential and commercial) with moderate-poor connectivity to to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from residential yards that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	Field Verified NWI Classification - Riverine (R5UBFx) Field Verified FLUCFCs - Vegetated non-forested wetlands (640) Field observations include slow moving water that flows within the culvert underneath SR 70. The wetland vegetation was dominated by invasive herbaceous vegetation such as taro (*Colocasia esculenta* FISC Cat 1) and Peruvian primose willow (*Ludwigia peruviana* FISC Cat 1) along the shoreline. Other vegetation noted includes pickerelweed (Pontedaria cordata). Little emergent or benthic vegetation present.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.3	with: 0

Delta = [with-current]
-0.3

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = 0.0096

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-171-LT

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCCS)	Freshwater Marshes (FDOT FLUCFCS)	Secondary Impact	0.066 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the north side of SR 70. This wetland is isolated. This wetland is within a 100 year floodplain.

Assessment area description

Field Verified FLUCCS - Vegetated non-forested wetlands (640), classified as a Freshwater Emergent Wetland (PEM1Fx) according to the USFWS' NWI and as Cropland and Pastureland (210) and Freshwater Marshes (641) according to FDOT's FLUCCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland to the west, south, and east, transportation borders the south, while high residential density is located to the north and northeast.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill *(Platalea ajaja*) - ST; Tricolored heron *(Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	July 24, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-171-LT
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	July 24, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is on the north side of SR 70. This wetland is isolated and is located within a 100 year floodplain. There is hydric soil mapped within this wetland, Basinger Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland, high residential density, and transportation.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. Some petroleum from the road and fertilizer run-off from cropland that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field Verified NWI Classification - Freshwater Emergent Wetland (PEM1Fx) Field Verified FLUCFCs - Vegetated non-forested wetlands (640) The wetland vegetation was dominated by invasive herbaceous vegetation including brazilian pepper (*Schinus terebinthifolius*) and Peruvian primrose-willow (*Ludwigia peruviana*).	2	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.26667	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.017622

Delta = [with-current]
-0.266666667

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-206-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
615 (FDOT FLUCFCS)	Streams and Lake Swamps (Bottomland) (FDOT FLUCFCS)	Permanent Impact	0.159 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the north and south of SR 70. This wetland is connected to a riverine wetland and is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Forested/Shrub Wetland (PFO1Fd) and a Riverine (R5UBH) according to the USFWS' NWI and as Streams and Lake Swamps (Bottomland) (615) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by crop and pastureland to the west and open land to the right.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron *(Egretta caerulea*) - ST; Roseate spoonbill *(Platalea ajaja)* - ST; Tricolored heron *(Egretta tricolor)* - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Fish, a red-shouldered hawk (*Buteo lineatus*), mosquitos (Order *Diptera*), guano (sign of bat), and cattle were all observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	July 11, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-206-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	July 11, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is on the north and south of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland; Basinger Fine Sand (0-2 percent slopes). This wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by crop and pastureland open land with good connectivity to to other habitats.	4	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland, pastureland, and open land that could potentially cause algal blooms and water quality degradation.	5	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field Verified NWI Classification - Freshwater Forested/Shrub Wetland (PFO1Fd) Field Verified FLUCFCs - Wetland Forested Mixed (630) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as water lettuce (*Pistia stratiotes*), maidencane (*Hymenachne hemitomon*) and alligator flag (*Thalia geniculata*) within the water and caesar weed (*Urena lobata*), fern (*Polypodiopsida spp* .), and saw palmetto (*Serenoa repens*) along the banks.	6	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.5	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0795

Delta = [with-current]
-0.5

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-206-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
615 (FDOT FLUCFCS)	Streams and Lake Swamps (Bottomland) (FDOT FLUCFCS)	Secondary Impact	0.034 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the north and south of SR 70. This wetland is connected to a riverine wetland and is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Forested/Shrub Wetland (PFO1Fd) and a Riverine (R5UBH) according to the USFWS' NWI and as Streams and Lake Swamps (Bottomland) (615) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by crop and pastureland to the west and open land to the right.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron *(Egretta caerulea*) - ST; Roseate spoonbill *(Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Fish, a red-shouldered hawk (*Buteo lineatus*), mosquitos (Order *Diptera*), guano (sign of bat), and cattle were all observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	July 11, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-206-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	July 11, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 with: 0	Wetland is on the north and south of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland; Basinger Fine Sand (0-2 percent slopes). This wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by crop and pastureland open land with good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 5 with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland, pastureland, and open land that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 6 with: 0	Field Verified NWI Classification - Freshwater Forested/Shrub Wetland (PFO1Fd) Field Verified FLUCFCs - Wetland Forested Mixed (630) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as water lettuce (*Pistia stratiotes*), maidencane (*Hymenachne hemitomon*) and alligator flag (*Thalia geniculata*) within the water and caesar weed (*Urena lobata*), fern (*Polypodiopsida spp* .), and saw palmetto (*Serenoa repens*) along the banks.	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.5 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres = -0.017

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.5	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-277-LT, WL-277-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (640)	Permanent Impact	0.066 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the north and south side of SR 70. This wetland extends further south and connects to a freshwater forested/shrub wetland, a pond, and a riverine wetland.

Assessment area description

Field Verified FLUCFCs - Vegetated Non-Forested Wetland
Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby to a Riverine (R4SBC). Wetland 7 is classified as Hardwood - Coniferous Mixed (434) and Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, upland hardwood - coniferous mix, other open lands, and residential low density.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Western mosquitofish (*Gambusia affinis*) was observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	September 27th, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-277-LT, WL-277-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	September 27th, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 with: 0	Wetland is on the north and south side of SR 70. This wetland extends further south and connects to a freshwater forested/shrub wetland, a pond, and a riverine wetland. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland, as well as transportation with moderate-good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 3 with: 0	Field Verified NWI Classification - Riverine (R2SBC) Field Verified FLUCFCs - Vegetated non-forested wetlands (640) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as pennywort (*Hydrocotyle umbellata*), smartweed (*Persicaria hydropiperoides*), willow (*Salix spp.*), alligator weed (*Alternanthera philoxeroides*), cattail (*Typha spp.*) and spatterdock (*Nuphar adven* a).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.33333 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres = -0.021978

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.333333333	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-277-LT, WL-277-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (640)	Secondary Impact	0.036 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the north and south side of SR 70. This wetland extends further south and connects to a freshwater forested/shrub wetland, a pond, and a riverine wetland.

Assessment area description

Field Verified FLUCFCs - Vegetated Non-Forested Wetland
Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby to a Riverine (R4SBC). Wetland 7 is classified as Hardwood - Coniferous Mixed (434) and Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, upland hardwood - coniferous mix, other open lands, and residential low density.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Western mosquitofish (*Gambusia affinis*) was observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	September 27th, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-277-LT, WL-277-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	September 27th, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 with: 0	Wetland is on the north and south side of SR 70. This wetland extends further south and connects to a freshwater forested/shrub wetland, a pond, and a riverine wetland. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland, as well as transportation with moderate-good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 3 with: 0	Field Verified NWI Classification - Riverine (R2SBC) Field Verified FLUCFCs - Vegetated non-forested wetlands (640) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as pennywort (*Hydrocotyle umbellata*), smartweed (*Persicaria hydropiperoides*), willow (*Salix spp.*), alligator weed (*Alternanthera philoxeroides*), cattail (*Typha spp.*) and spatterdock (*Nuphar adven* a).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.33333 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres =-0.011988

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.333333333	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-302-LT; WL-302-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	12-Jul-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is located on the north and south sides, connected by a culvert on SR 70. It is about 0.1 miles west of Cross Avenue. The wetland is within a 100-year floodplain. There is no hydric soil mapped within this wetland. Wetland 8 will be impacted by widening of ROW and construction of new lanes on SR 70. Wetland 8 is surrounded by cropland and pastureland with moderate connectivity.	4	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	4	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field Verified NWI Classification - Freshwater Emergent Wetland (PEM1Fx) Field Verified FLUCFCs - Vegetated non-forested wetlands (640) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane *(Hymenachne hemitomon*), mud flower (*Micranthemum*), creeping primrose willow (*Ludwigia repens*), mexican primrose (*Ludwigia octavalis*), pickerelweed (*Pontedaria cordata*), swamp knotweed (*Persicaria*).	5	0

Score = sum of above scores/30 (if uplands, divide by 20)		
current or w/o pres	with	
0.43333	0	

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =-0.047663

Delta = [with-current]
-0.433333333

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-316-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Permanent Impact	0.012 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the south side of SR 70. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1C) by USFWS's NWI and as Freshwater Marshes (641), Cropland and Pastureland (210), and Transportation (810) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland on the east, west, and south, while transportation borders the north.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Golden orb weavers (Genus *Nephila*) were observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	September 27th, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-316-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	September 27th, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is on the south side of SR 70. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland, Basinger Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland, as well transportation with poor connectivity to to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from the cropland and pastureland that could potentially cause algal blooms and water quality degradation.	4	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field Verified NWI Classification - Freshwater Emergent Wetland (PEM1C) Field Verified FLUCFCs - Freshwater Marshes (641) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as bulrush (*Schoenoplectus spp*), spatterdock (*Nuphar advena*), maidencane (*Hymenachne hemitomon*), and soft rush (*Juncus effusus*).	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.36667	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0044

Delta = [with-current]
-0.366666667

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-316-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Secondary Impact	0.083 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the south side of SR 70. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1C) by USFWS's NWI and as Freshwater Marshes (641), Cropland and Pastureland (210), and Transportation (810) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland on the east, west, and south, while transportation borders the north.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	September 27th, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-316-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	September 27th, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is on the south side of SR 70. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland, Basinger Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland, as well transportation with poor connectivity to to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from the cropland and pastureland that could potentially cause algal blooms and water quality degradation.	4	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field Verified NWI Classification - Freshwater Emergent Wetland (PEM1C) Field Verified FLUCFCs - Freshwater Marshes (641) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as bulrush (*Schoenoplectus spp*), spatterdock (*Nuphar advena*), maidencane (*Hymenachne hemitomon*), and soft rush (*Juncus effusus*).	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.36667	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.03043

Delta = [with-current]
-0.366666667

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-354-L

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDT FLUCFCS)	Permanent Impact	0.328 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the north side of SR 70. The wetland is approximately 0.5 miles east of Cross Avenue. The wetland is within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Forested/Shrub Wetland (PFO1Fd) and Riverine (R5UBH) according to USFWS's NWI. Wetland is classified as Residential, Low Density (less than two dwelling units per acre) (110), Streams and Lake Swamps (Bottomland) (615), and Freshwater Marshes (641), and Hardwood - Coniferous Mixed (434) accoridng to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by Upland hardwood-coniferous mix to the east and lake swamps to the west, while transportation (SR 70) borders the north and south.	The wetland is part of Joshua Creek and is unique to the surrounding landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

American alligator (*Alligator mississippiensis*), Great Blue Heron (*Ardea herodias*), Great Egret (*Ardea alba*) were observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	September 27th, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-354-L
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, Liliana Sikes	September 27th, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 5 with: 0	Wetland is located on the north side of SR 70. The wetland is approximately 0.5 miles east of Cross Avenue. The wetland is within a 100 year floodplain. There is hydric soil mapped within this wetland, Anclote Mucky Fine Sand (0-1 percent slopes). Wetland 10 will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by Upland hardwood-coniferous mix and lake swamps with moderate connectivity to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 4 with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 4 with: 0	Field Verified NWI Classification - Riverine (R5UBH) Field Verified FLUCFCs - Freshwater Marshes (641) Field observations include flowing, moving water. The wetland vegetation was dominated by herbaceous and woody vegetation such as maidencane (*Hymenachne hemitomon*), pennywort (*Centella asiatica*), torpedo grass *(Panicum repens*), willow (*Salix caroliniana*), cogon (*Imperata cylindrica*), Mexican primrose (*Ludwigia octovalvis*), pickerelweed (*Pontedaria cordata*), duck potato (*Saggitaria lancifolia*), Peruvian primrose *(Ludwigia peruviana*), Oaks (*Quercus spp.*), red maple *(Acer rubrum)* , Sabel palm (*Sabel palmetto*), and cypress (*Taxodium spp.*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.43333 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres = -0.14212

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.433333333	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-354-L

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDT FLUCFCS)	Secondary Impact	0.095 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the north side of SR 70. The wetland is approximately 0.5 miles east of Cross Avenue. The wetland is within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Forested/Shrub Wetland (PFO1Fd) and Riverine (R5UBH) according to USFWS's NWI. Wetland 10 is classified as Residential, Low Density (less than two dwelling units per acre) (110), Streams and Lake Swamps (Bottomland) (615), and Freshwater Marshes (641), and Hardwood - Coniferous Mixed (434) accoridng to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by Upland hardwood-coniferous mix to the east and lake swamps to the west, while transportation (SR 70) borders the north and south.	The wetland is part of Joshua Creek and is unique to the surrounding landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

American alligator (*Alligator mississippiensis*), Great Blue Heron (*Ardea herodias*), Great Egret (*Ardea alba*) were observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	September 27th, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-354-L
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, Liliana Sikes	September 27th, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is located on the north side of SR 70. The wetland is approximately 0.5 miles east of Cross Avenue. The wetland is within a 100 year floodplain. There is hydric soil mapped within this wetland, Anclote Mucky Fine Sand (0-1 percent slopes). Wetland 10 will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by Upland hardwood-coniferous mix and lake swamps with moderate connectivity to other habitats.	5	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	4	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field Verified NWI Classification - Riverine (R5UBH) Field Verified FLUCFCs - Freshwater Marshes (641) Field observations include flowing, moving water. The wetland vegetation was dominated by herbaceous and woody vegetation such as maidencane (*Hymenachne hemitomon*), pennywort (*Centella asiatica*), torpedo grass *(Panicum repens*), willow (*Salix caroliniana*), cogon (*Imperata cylindrica*), Mexican primrose (*Ludwigia octovalvis*), pickerelweed (*Pontedaria cordata*), duck potato (*Saggitaria lancifolia*), Peruvian primrose *(Ludwigia peruviana*), Oaks (*Quercus spp.*), red maple *(Acer rubrum)* , Sabel palm (*Sabel palmetto*), and cypress (*Taxodium spp.*).	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.43333	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.04116

Delta = [with-current]
-0.433333333

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-397-RT, WL-403-L

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641; 644 (FDOT FLUCFCS)	Freshwater Marshes; Emergent Aquatic Vegetation (FDOT FLUCFCS)	Permanent Impact	0.058 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the north and south side of SR 70 connected by a culvert. This wetland is connected to other freshwater emgergent wetlands and freshwater ponds. A portion of this wetland passes through a 100 year floodplain.

Assessment area description

Wetland is classified as a Riverine (R4SBC) according to the USFWS's NWI. Wetland is classified as Cropland and Pastureland (210), Transportation (810), and Freshwater Marshes (641) by FDOT's FLUCFCS. Wetland appears to be managed as vegetation was removed sometime between February and September 2024.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland bisected by transportation (SR 70).	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anserifromes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), bufferflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill *(Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

An anhinga (*Anhinga anhinga*), a southeastern five-lined skink (*Plestiodon inexpectatus*), and cattle were observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-397-RT, WL-403-L
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 — with: 0	Wetland is on the north and south side of SR 70 connected by a culvert. This wetland is connected to other freshwater emgergent wetlands and freshwater ponds. A portion of this wetland passes through a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes), Valkaria Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland, as well as transportation with moderate-good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 2 — with: 0	Partially within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Banks are steep, erosion is present along the banks. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 4 — with: 0	Field Verified NWI Classification - Riverine (R4SBC) Field Verified FLUCFCs - Freshwater Marshes (641); Emergent Aquatic Vegetation (644) Field observations include slow moving water, anhinga (*Anhinga anhinga*), and cattle. The wetland vegetation was dominated by herbaceous vegetation such as spikerush (*Eleocharis spp* .), spatterdock (*Nuphar advena*), water spangles (*Salvinia ssp.*), madiencane (*Hymenachne hemitomon*), Mexican primrose (*Ludwigia octovalis*), hyacinth (*Eichornia crassipes*), willow (*Salix caroliniana*), west indian marsh grass (*Hymenachne amplexicaulis*), and occasional sweetgum trees (*Liquidambar styraciflua*) along the edge and oak trees (*Quercus spp* .).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0174
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-397-RT, WL-403-L

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641; 644 (FDOT FLUCFCS)	Freshwater Marshes; Emergent Aquatic Vegetation (FDOT FLUCFCS)	Secondary Impact	0.025 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the north and south side of SR 70 connected by a culvert. This wetland is connected to other freshwater emgergent wetlands and freshwater ponds. A portion of this wetland passes through a 100 year floodplain.

Assessment area description

Wetland is classified as a Riverine (R4SBC) according to the USFWS's NWI. Wetland is classified as Cropland and Pastureland (210), Transportation (810), and Freshwater Marshes (641) by FDOT's FLUCFCS. Wetland appears to be managed as vegetation was removed sometime between February and September 2024.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland bisected by transportation (SR 70).	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anserifromes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), bufferflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill *(Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

An anhinga (*Anhinga anhinga*), a southeastern five-lined skink (*Plestiodon inexpectatus*), and cattle were observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-397-RT, WL-403-L
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 — with: 0	Wetland is on the north and south side of SR 70 connected by a culvert. This wetland is connected to other freshwater emgergent wetlands and freshwater ponds. A portion of this wetland passes through a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes), Valkaria Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland, as well as transportation with moderate-good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 2 — with: 0	Partially within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Banks are steep, erosion is present along the banks. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 4 — with: 0	Field Verified NWI Classification - Riverine (R4SBC) Field Verified FLUCFCs - Freshwater Marshes (641); Emergent Aquatic Vegetation (644) Field observations include slow moving water, anhinga (*Anhinga anhinga*), and cattle. The wetland vegetation was dominated by herbaceous vegetation such as spikerush (*Eleocharis spp* .), spatterdock (*Nuphar advena*), water spangles (*Salvinia ssp.*), madiencane (*Hymenachne hemitomon*), Mexican primrose (*Ludwigia octovalis*), hyacinth (*Eichornia crassipes*), willow (*Salix caroliniana*), west indian marsh grass (*Hymenachne amplexicaulis*), and occasional sweetgum trees (*Liquidambar styraciflua*) along the edge and oak trees (*Quercus spp* .).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0075
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-448-RT

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marsh (FDOT FLUCFCS)	Permanent Impact	0.143 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is just east of SE Turkey Hammock Road. The wetland is within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI but is nearby a Freshwater Emergent Wetland (PEM1Fd) and is classified as Cropland and Pastureland (210) according to FDOT FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by crops and pastureland. It is approximately 0.13 miles from SE Turkey Hammock Road and approximately 4 miles west of the Florida Corrections Academy.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	October 23rd, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-448-RT
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is located on the south side of SR 70. The wetland is just east of SE Turkey Hammock Road. The wetland is within a 100 year floodplain.There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes) and Basinger Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate to low connectivity to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field Verified NWI Classification - Freshwater Emergent Wetland (PEM1Fd) Field Verified FLUCFCs - Freshwater Marsh (641) Dominated by grass spp. and spikerush (*Eleocharis spp.*).	2	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.26667	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.038038

Delta = [with-current]
-0.266666667

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-448-RT

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marsh (FDOT FLUCFCS)	Secondary Impact	0.175 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is just east of SE Turkey Hammock Road. The wetland is within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI but is nearby a Freshwater Emergent Wetland (PEM1Fd) and is classified as Cropland and Pastureland (210) according to FDOT FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by crops and pastureland. It is approximately 0.13 miles from SE Turkey Hammock Road and approximately 4 miles west of the Florida Corrections Academy.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	October 23rd, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-448-RT
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is located on the south side of SR 70. The wetland is just east of SE Turkey Hammock Road. The wetland is within a 100 year floodplain.There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes) and Basinger Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate to low connectivity to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field Verified NWI Classification - Freshwater Emergent Wetland (PEM1Fd) Field Verified FLUCFCs - Freshwater Marsh (641) Dominated by grass spp. and spikerush (*Eleocharis spp.*).	2	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.26667	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.046655

Delta = [with-current]
-0.266666667

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-466-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Permanent Impact	0.408 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the south side of SR 70. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1Cd) according to the USFWS' NWI and as Freshwater Marshes (641), Cropland and Pastureland (210) and Wet Prairies (643) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, transportation, and other freshwater marshes.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	October 23, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-466-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 / with: 0	Wetland is located on the south side of SR 70. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-1 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate-poor connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 / with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 2 / with: 0	Field Verified NWI Classification - Freshwater emergent wetland (PEM1Cd) Field Verified FLUCFCs - Freshwater marshes (641) The wetland vegetation was dominated by herbaceous vegetation, such as maidencane (*Hymenachne hemitomon*), pennywort (*Hydroctyle spp.*), and dogfennel (*Eupatorium capillifolium*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.26667 / with: 0	Preservation adjustment factor =	FL = delta x acres = -0.10877
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.266666667	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-480-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Permanent Impact	0.163 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is to the east of SE Turkey Hammock Road and to the west of NE Four Mile Grade.

Assessment area description

Wetland is not classified as a wetland according to the USFWS's NWI and is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by agricultural land. Joshua Water Control District is approximately 2.6 miles west of Wetland 14. Florida Corrections Academy is located approximately 3 miles west of Wetland 14.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-480-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is located on the south side of SR 70. The wetland is to the east of SE Turkey Hammock Road and to the west of NE Four Mile Grade. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland 37 will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.	4	0
.500(6)(b)Water Environment (n/a for uplands)	This wetland is not within a 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field Verified NWI Classification - Freshwater Emergent Wetland (PEM1C) Field Verified FLUCFCs - Vegetated non-forested wetlands (640) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), caesars weed (*Urena lobata*), and sedges (Cyperus spp.).	2	0

Score = sum of above scores/30 (if uplands, divide by 20)		
current or w/o pres	with	
0.3	0	

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0489

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-480-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Secondary Impact	0.225 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is to the east of SE Turkey Hammock Road and to the west of NE Four Mile Grade.

Assessment area description

Wetland is not classified as a wetland according to the USFWS's NWI and is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by agricultural land. Joshua Water Control District is approximately 2.6 miles west of Wetland 14. Florida Corrections Academy is located approximately 3 miles west of Wetland 14.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-480-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 4	with: 0	Wetland is located on the south side of SR 70. The wetland is to the east of SE Turkey Hammock Road and to the west of NE Four Mile Grade. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland 37 will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	This wetland is not within a 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 2	with: 0	Field Verified NWI Classification - Freshwater Emergent Wetland (PEM1C) Field Verified FLUCFCs - Vegetated non-forested wetlands (640) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), caesars weed (*Urena lobata*), and sedges (Cyperus spp.).

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.3	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0675

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-486-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Permanent Impact	0.0113 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the south side of SR 70. This wetland has moderate connectivity to other nearby wetlands.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby a Freshwater Emergent Wetland (PEM1C), and is considered Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, while transportation (SR 70) borders the north.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Fish, waterfowl, reptiles, amphibians, small amphibians	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron *(Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	October 23, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-486-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 / with: 0	Wetland is on the south side of SR 70. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). There are hydric soils mapped within this wetland; Basinger Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland, while transportation with moderate-poor connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 2 / with: 0	This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 2 / with: 0	Field Verified NWI Classification - Freshwater emergent wetland(PEM1Cd) Field Verified FLUCFCs - Vegetated non-forested wetlands (640) Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (Hymenachne *hemitomon*), west indian marshgrass (Hymenachne amplexicaulis), and caesar's weed (*Urena lobata*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.23333 / with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0025663
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.233333333	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-492-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Permanent Impact	0.415 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. It connects to other surface water through a culvert traveling east. The wetland is west of the Florida Corrections Academy and is not located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Riverine (R5UBFx) according the USFWS's NWI and Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland. It is located approximately 2.7 miles west of the Florida Corrections Academy.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-492-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is located on the south side of SR 70. It connects to other surface water through a culvert traveling east. The wetland is west of the Florida Corrections Academy and is not located within a 100 year floodplain. There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes), and Malabar Fine Sand (0-2 percent slopes). Wetland 16 will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.	4	0
.500(6)(b)Water Environment (n/a for uplands)	This wetland is not located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane *(Hymenachne hemitomon*), west indian marsh grass (*Hymenachne amplexicaulis*), and dogfennel (*Eupatorium capillifolium*).	2	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.3	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.1245

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-492-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Secondary Impact	0.319 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. It connects to other surface water through a culvert traveling east. The wetland is west of the Florida Corrections Academy and is not located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Riverine (R5UBFx) according the USFWS's NWI and Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland. It is located approximately 2.7 miles west of the Florida Corrections Academy.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-492-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 — with: 0	Wetland is located on the south side of SR 70. It connects to other surface water through a culvert traveling east. The wetland is west of the Florida Corrections Academy and is not located within a 100 year floodplain. There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes), and Malabar Fine Sand (0-2 percent slopes). Wetland 16 will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 — with: 0	This wetland is not located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 2 — with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane *(Hymenachne hemitomon*), west indian marsh grass (*Hymenachne amplexicaulis*), and dogfennel (*Eupatorium capillifolium*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0957
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-518-R, WL-564-L

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Permanent Impact	1.396 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK; 31001011006		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the south side of SR 70. This wetland is located north of the riverine wetlands it is connected to.

Assessment area description

Wetland is classified as Freshwater Pond (PAB3Hx) and Riverine (R5UBFx) according to USFWS's NWI. Wetland is classified as Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, while transportation borders the north (SR 70).	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (Alligator mississippiensis) - FT (S/A); Little blue heron (Egretta caerulea) - ST; Roseate spoonbill (Platalea ajaja) - ST; Tricolored heron (Egretta tricolor) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Black-bellied Whistling-ducks (*Dendrocygna autumnalis*), cattle, turkey (*Meleagris gallopavo*), little blue heron (*Egretta caerulea*), wood stork (*Mycteria americana*), and great egrets (*Ardea alba*) were observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-518-R, WL-564-L
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 with: 0	Wetland is on the south side of SR 70. This wetland is located north of the riverine wetlands it is connected to. There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes, and Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 5 with: 0	Field Verified NWI Classification - Riverine (R5UBFx); freshwater pond (PAB3Hx) Field Verified FLUCFCs - Vegetated non-forested wetlands (640); Maidencane (6414) Field observations include slow moving water. This wetland vegetation was dominated by west indian marsh grass (*Hymenachne amplexicaulis*) during Feburary 2024; however, over the summer the west indian marsh grass was removed. Other vegetation present includes fireflag (*Thalia ssp.*), water lettuce (*Pistia stratiotes*), sedges (*Cyperus ssp* .), spikerush (*Eleocharis ssp.*), and occasional oaks along the edge (*Quercus ssp* .). In the northern canal wetland vegetation included willow (*Salix caroliniana*), peruvian primrose (*Ludwigia peruviana*), maidencane (*Hymenachne hemitomon*), and cattail (*Typha ssp.*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.4 with: 0	Preservation adjustment factor =	FL = delta x acres = -0.5584
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.4	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-518-R, WL-564-L

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Secondary Impact	1.016 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK; 31001011006		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland s on the south side of SR 70. This wetland is located north of the riverine wetlands it is connected to.

Assessment area description

Wetland is classified as Freshwater Pond (PAB3Hx) and Riverine (R5UBFx) according to USFWS's NWI. Wetland is classified as Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, while transportation borders the north (SR 70).	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (Alligator mississippiensis) - FT (S/A); Little blue heron (Egretta caerulea) - ST; Roseate spoonbill (Platalea ajaja) - ST; Tricolored heron (Egretta tricolor) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Black-bellied Whistling-ducks (*Dendrocygna autumnalis*), cattle, turkey (*Meleagris gallopavo*), little blue heron (*Egretta caerulea*), wood stork (*Mycteria americana*), and great egrets (*Ardea alba*) were observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-518-R, WL-564-L
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 with: 0	Wetland is on the south side of SR 70. This wetland is located north of the riverine wetlands it is connected to. There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes, and Malabar Fine Sand (0-2 percent slopes). This wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 5 with: 0	Field observations include slow moving water. The wetland vegetation was dominated by west indian marsh grass (*Hymenachne amplexicaulis*) during Feburary 2024; however, over the summer the west indian marsh grass was removed. Other vegetation present includes fireflag (*Thalia ssp.*), water lettuce (*Pistia stratiotes*), sedges (*Cyperus ssp* .), spikerush (*Eleocharis ssp.*), and occasional oaks along the edge (*Quercus ssp* .). In the northern canal wetland vegetation included willow (*Salix caroliniana*), peruvian primrose (*Ludwigia peruviana*), maidencane (*Hymenachne hemitomon*), and cattail (*Typha ssp.*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.4 with: 0	Preservation adjustment factor =	FL = delta x acres = -0.4064
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.4	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	WL-584-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Permanent Impact	0.036 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. It is east of NE Four Mile Grade and is within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby to a Freshwater Emergent Wetland (PEM1Fx). Wetland is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by agricultural land. Wetland 18 is located approximately 1 mile west of the Florida Corrections Academy. The wetland is approximately 0.6 miles southwest of Joshua Water Control District.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron *(Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-584-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is located on the south side of SR 70. Other surface water is located directly east. It is east of NE Four Mile Grade and is within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*) and sedges (*Cyperus spp.*).	2	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.26667	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.009576

Delta = [with-current]
-0.266666667

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	WL-584-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Permanent Impact	0.090 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. It is east of NE Four Mile Grade and is within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby to a Freshwater Emergent Wetland (PEM1Fx). Wetland is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by agricultural land. Wetland 18 is located approximately 1 mile west of the Florida Corrections Academy. The wetland is approximately 0.6 miles southwest of Joshua Water Control District.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron *(Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-584-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 — with: 0	Wetland is located on the south side of SR 70. Other surface water is located directly east. It is east of NE Four Mile Grade and is within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 — with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 2 — with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*) and sedges (*Cyperus spp.*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.26667 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.023994
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.266666667	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-585-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
643 (FDOT FLUCFCS)	Wet Praire (FDOT FLUCFCS)	Permanent Impact	0.072 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the south side of SR 70.

Assessment area description

Wetland is not classified as a wetland by the USFWS's NWI; however, it is near a Freshwater Emergent Wetland (PEM1Fx). Wetland is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, while transportation (SR 70) borders the south.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	October 23, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-585-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is on the south side of SR 70. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland, as well as transportation with moderate-poor connectivity to to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	2	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as sedges (*Cyperus spp.*) and torpedo grass (*Panicum repens*).	2	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.23333	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0167976

Delta = [with-current]
-0.233333333

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-588-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Permanent Impact	0.003 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. Other surface water is located directly east of Wetland 18. It is east of NE Four Mile Grade and is within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby a Freshwater Emergent Wetland (PEM1Fx). Wetland is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland. Wetland 18 is located approximately 1 mile west of the Florida Corrections Academy. The wetland is approximately 0.7 miles southwest of Joshua Water Control District.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-588-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 — with: 0	Wetland is located on the south side of SR 70. It is east of NE Four Mile Grade and is within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 2 — with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 2 — with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*) and sedges (Cyperus spp.).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.23333 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0006999
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.233333333	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-588-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Secondary Impact	0.036 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. Other surface water is located directly east of Wetland 18. It is east of NE Four Mile Grade and is within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby a Freshwater Emergent Wetland (PEM1Fx). Wetland 20 is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland. Wetland 18 is located approximately 1 mile west of the Florida Corrections Academy. The wetland is approximately 0.7 miles southwest of Joshua Water Control District.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	23-Oct-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-588-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	23-Oct-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 — with: 0	Wetland is located on the south side of SR 70. It is east of NE Four Mile Grade and is within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 2 — with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 2 — with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*) and sedges (Cyperus spp.).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.23333 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0083988
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.233333333	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-617-L, WL-589-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	27-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is on the north and south side of SR 70 connected by two bridges. Connected wetlands extend north, east, and south. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation and an industrial with moderate-poor connectivity to to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), water lettuce (*Pistia stratiotes*), pennywort (*Hydrocotyle spp* .), spatterdock (*Nuphar advena*), saw palmetto (*Serenoa repens*), torpedo grass (*Panicum repens*), cabbage palm (*Sabal palmetto*), and Brazillian pepper (*Schinus terebinthifolia*).	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.33333	0

Delta = [with-current]
-0.333333333

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = -0.0284626

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-678-R, WL-729-R, WL-730-RT,WL-769-RT

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (640)	Permanent Impact	0.245 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the north and south sides of SR 70. The wetland is located adjacent to the Desoto Recycling and Disposal facility. The wetland is within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1Fx) and Riverine (R2UBHx) according to USFWS's NWI. Wetland is classified as Mixed Rangeland (330), Industrial (150), Streams and Lake Swamps (Bottomland) (615), Cropland and Pastureland (210), Institutional (170), Shrub and Brushland (320), Distrubed Land (740), and Streams and Waterways (510) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
The wetland is surrounded by cropland and pastureland, institutional, and other open land and is located approximately 0.25 miles from the entrance of the Desoto Recylcing and Disposal facility.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	15-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-678-R, WL-729-R, WL-730-RT,WL-769-RT
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	15-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Wetland is located on the north and south sides of SR 70. The wetland is located adjacent to the Desoto Recycling and Disposal facility. There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes), Malabar Fine Sand (0-2 percent slopes), and Basinger Fine Sand (0-2 percent slopes). The wetland is within a 100 year floodplain. Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land, institutional, and other open land, with moderate connectivity to to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	Field observations include flowing moving water. The wetland vegetation was dominated by herbaceous and woody vegetation such as maidencane (*Panicum hemitomon*), caesar weed (Urena lobata), brazillian pepper (*Schinus terebinthifolia*), west indian marsh grass (*Hymenachne amplexicaulis*), willow (*Salix spp.*), mexican primrose-willow (*Ludwigia octovalis*).

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.3	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0735

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-678-R, WL-729-R, WL-730-RT,WL-769-RT

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (640)	Secondary Impact	0.085 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the north and south sides of SR 70. The wetland is located adjacent to the Desoto Recycling and Disposal facility. The wetland is within a 100 year floodplain.

Assessment area description

Wetlandis classified as a Freshwater Emergent Wetland (PEM1Fx) and Riverine (R2UBHx) according to USFWS's NWI. Wetland is classified as Mixed Rangeland (330), Industrial (150), Streams and Lake Swamps (Bottomland) (615), Cropland and Pastureland (210), Institutional (170), Shrub and Brushland (320), Distrubed Land (740), and Streams and Waterways (510) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
The wetland is surrounded by cropland and pastureland, institutional, and other open land and is located approximately 0.25 miles from the entrance of the Desoto Recylcing and Disposal facility.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	15-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-678-R, WL-729-R, WL-730-RT,WL-769-RT
Impact or Mitigation: Secondary Impact	Assessment conducted by: James Fine, Katherine Lawlor, and Liliana Sikes	Assessment date: 15-Aug-24

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 with: 0	Wetland is located on the north and south sides of SR 70. The wetland is located adjacent to the Desoto Recycling and Disposal facility. There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes), Malabar Fine Sand (0-2 percent slopes), and Basinger Fine Sand (0-2 percent slopes). The wetland is within a 100 year floodplain. Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land, institutional, and other open land, with moderate connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 3 with: 0	Field observations include flowing moving water. The wetland vegetation was dominated by herbaceous and woody vegetation such as maidencane (*Panicum hemitomon*), caesar weed (Urena lobata), brazillian pepper (*Schinus terebinthifolia*), west indian marsh grass (*Hymenachne amplexicaulis*), willow (*Salix spp.*), mexican primrose-willow (*Ludwigia octovalis*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres =-0.0255

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-699-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Permanent Impact	0.001 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. This wetland is located south of the freshwater emergent wetlands it is adjacent to. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby a Riverine (PEM1Fx). Wetland is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland in all directions. The wetland is located approximately 1.1 miles east of the entrance of the Florida Corrections Academy.	Not unique to the relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	13-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-699-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	13-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 — with: 0	Wetland is located on the south side of SR 70. This wetland is located south of the freshwater emergent wetlands it is adjacent to. This wetland is located within a 100 year floodplain. There is no hydric soil mapped within this wetland. The wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland with moderate-poor connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 — with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 3 — with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as duck potato (*Sagittaria lancifolia*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0003
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-699-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Secondary Impact	0.007 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. This wetland is located south of the freshwater emergent wetlands it is adjacent to. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby a Riverine (PEM1Fx). Wetland is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland in all directions. The wetland is located approximately 1.1 miles east of the entrance of the Florida Corrections Academy.	Not unique to the relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	13-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-699-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	13-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 — with: 0	Wetland is located on the south side of SR 70. This wetland is located south of the freshwater emergent wetlands it is adjacent to. This wetland is located within a 100 year floodplain. There is no hydric soil mapped within this wetland. The wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and pastureland with moderate-poor connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 — with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 3 — with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as duck potato (*Sagittaria lancifolia*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0021
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-700-R, WL-702-RT

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Permanent Impact	0.263 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the south side of SR 70. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby a Riverine (R5UBFx) and is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, while transportation (SR 70) borders the north.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	August 14, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-700-R, WL-702-RT
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	August 14, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Wetland is on the south side of SR 70. This wetland is located within a 100 year floodplain. There is no hydric soil mapped within this wetland. Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate-poor connectivity to to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), pennywort (*Hydrocotyle umbellata*), lanceleaf arrowhead (*Sagittaria lancifolia*), and dog fennel (*Eupatorium capillifolium*).

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.3	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0789

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-700-R, WL-702-RT

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands (FDOT FLUCFCS)	Secondary Impact	0.154 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is on the south side of SR 70. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby a Riverine (R5UBFx) and is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, while transportation (SR 70) borders the north.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	August 14, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-700-R, WL-702-RT
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	August 14, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Wetland is on the south side of SR 70. This wetland is located within a 100 year floodplain. There is no hydric soil mapped within this wetland. Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate-poor connectivity to to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), pennywort (*Hydrocotyle umbellata*), lanceleaf arrowhead (*Sagittaria lancifolia*), and dog fennel (*Eupatorium capillifolium*).

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.3	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0462

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-715-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands	Permanent Impact	0.187 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is isolated and is not connected to any other wetlands.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby a Freshwater Emergent Wetland (PEM1Fx) and is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland. It is located approximately 1.4 miles east of the entrance to the Florida Corrections Academy.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	14-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-715-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	14-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Wetland is located on the south side of SR 70. The wetland is isolated and is not connected to any other wetlands. There is no hydric soil mapped within this wetland. Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate-poor connectivity to to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), and alligator flag (*Thalia geniculata*).

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 / with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0561
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-715-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetlands	Secondary Impact	0.069 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is isolated and is not connected to any other wetlands.

Assessment area description

Wetland is not classified as a wetland according to USFWS's NWI; however, it is nearby a Freshwater Emergent Wetland (PEM1Fx) and is classified as Cropland and Pastureland (210) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland. It is located approximately 1.4 miles east of the entrance to the Florida Corrections Academy.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	14-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-715-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	14-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Wetland is located on the south side of SR 70. The wetland is isolated and is not connected to any other wetlands. There is no hydric soil mapped within this wetland. Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate-poor connectivity to to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), and alligator flag (*Thalia geniculata*).

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 / with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0207
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-992-L

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Permanent Impact	1.024 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
31001011002 COW SLOUGH; 031001011001 LONG POINT MARSH; 030901030103 WEST BRANCH OF FISHEATING CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the north side of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1Fd) according to USFWS's NWI. Wetland is classified as Vegetated Non-Forested Wetland (640) and Freshwater Marshes (641) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, other open lands (rural), vegetated non-forested wetlands, and freshwater marshes.	This wetland is unique to the surrounding landscape

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Night heron (*Nycticorax nycticorax*) was observed eating a fish, a great blue heron (*Ardea herodias*), a turtle (*Trachemys spp.*), a cattle egret (*Bubulcus ibis*), a red-shouldered hawk (*Buteo lineatus*), and a belted kingfisher (*Megaceryle alcyon*) were also observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	29-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-992-L
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	29-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 with: 0	Wetland is located on the north side of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain.There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes), Basinger Fine Sand (0-2 percent slopes), and Samsula Muck (0-1 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate-good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 5 with: 0	Field observations include fast to moderately fast moving water. The wetland vegetation was dominated by herbaceous vegetation such as west indian marsh grass (Hymenachne amplexicaulis, FISC Cat 1), pennywort *(Hydrocotyle umbellata*), duck potato (*Sagittaria lancifolia*), water lettuce (*Pistia stratiotes*), peruvian primrose (*Ludwigia peruviana*), maidencane (Hymenachne hemitomon), willow (*Saslix caroliniana*), wax myrtle (*Myrica cerifera*), and alligator flag (*Thalia geniculata*). Other vegetation noted includes sabel palm (Sabel palmetto), spider lily (*Hymenocallis spp* .), caesar weed (*Urena lobata*), and fern (*Polypodiopsida spp.*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.4 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres = -0.4096

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.4	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-992-L

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Secondary Impact	0.464 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
31001011002 COW SLOUGH; 031001011001 LONG POINT MARSH; 030901030103 WEST BRANCH OF FISHEATING CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the north side of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1Fd) according to USFWS's NWI. Wetland is classified as Vegetated Non-Forested Wetland (640) and Freshwater Marshes (641) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, other open lands (rural), vegetated non-forested wetlands, and freshwater marshes.	This wetland is unique to the surrounding landscape

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Night heron (*Nycticorax nycticorax*) was observed eating a fish, a great blue heron (*Ardea herodias*), a turtle (*Trachemys spp.*), a cattle egret (*Bubulcus ibis*), a red-shouldered hawk (*Buteo lineatus*), and a belted kingfisher (*Megaceryle alcyon*) were also observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	29-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-992-L
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	29-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 with: 0	Wetland is located on the north side of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain.There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes), Basinger Fine Sand (0-2 percent slopes), and Samsula Muck (0-1 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate-good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 5 with: 0	Field observations include fast to moderately fast moving water. The wetland vegetation was dominated by herbaceous vegetation such as west indian marsh grass (Hymenachne amplexicaulis, FISC Cat 1), pennywort *(Hydrocotyle umbellata*), duck potato (*Sagittaria lancifolia*), water lettuce (*Pistia stratiotes*), peruvian primrose (*Ludwigia peruviana*), maidencane (Hymenachne hemitomon), willow (*Saslix caroliniana*), wax myrtle (*Myrica cerifera*), and alligator flag (*Thalia geniculata*). Other vegetation noted includes sabel palm (Sabel palmetto), spider lily (*Hymenocallis spp* .), caesar weed (*Urena lobata*), and fern (*Polypodiopsida spp.*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.4 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres = -0.1856

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.4	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-989-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Permanent Impact	0.518 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
31001011002 COW SLOUGH; 030901030103 WEST BRANCH OF FISHEATING CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain.

Assessment area description

Wetland is classified as Freshwater Emergent Wetland (PEM1Cd) according to USFWS's NWI and as Cropland and Pastureland (210), and Freshwater Marshes (641) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional
Wetland is surrounded by freshwater marshes, as well cropland and pastureland. Transportation (SR 70) borders the north.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

A red-shouldered hawk (*Buteo lineatus*) was observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	19-Sep-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-989-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	19-Sep-24

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 4	with: 0
Wetland is located on the south side of SR 70.The wetland is within a 100 year floodplain. There is hydric soil mapped within this wetland, Samsula Muck (0-1 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to to other habitats.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 4	with: 0
Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 0
Field observations include slow moving water where water is standing. Portions of the wetland can be characterized as grass mats with little to no standing water. The wetland vegetation was dominated by subcanopy vegetation such as willow (Salix caroliniana), maidencane *(Hymenachne hemitomon*), Peruvian primrose-willow (*Ludwigia peruviana*), cabbage palm (*Sabal palmetto*), alligator flag (Thalia geniculata), and cattail (*Typha spp.*).		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.43333	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.22429

Delta = [with-current]
-0.433333333

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-989-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Secondary Impact	0.686 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
31001011002 COW SLOUGH; 030901030103 WEST BRANCH OF FISHEATING CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain.

Assessment area description

Wetland is classified as Freshwater Emergent Wetland (PEM1Cd) according to USFWS's NWI and as Cropland and Pastureland (210), and Freshwater Marshes (641) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional
Wetland is surrounded by freshwater marshes, as well cropland and pastureland. Transportation (SR 70) borders the north.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

A red-shouldered hawk (*Buteo lineatus*) was observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	19-Sep-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-989-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	19-Sep-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 4	with: 0
Wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain. There is hydric soil mapped within this wetland, Samsula Muck (0-1 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to to other habitats.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 4	with: 0
Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 0
Field observations include slow moving water where water is standing. Portions of this wetland can be characterized as grass mats with little to no standing water. The wetland vegetation was dominated by subcanopy vegetation such as willow (Salix caroliniana), maidencane *(Hymenachne hemitomon*), Peruvian primrose-willow (*Ludwigia peruviana*), cabbage palm (*Sabal palmetto*), alligator flag (Thalia geniculata), and cattail (*Typha spp.*).		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.43333	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =-0.29724

Delta = [with-current]
-0.433333333

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-993-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Permanent Impact	0.009 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
31001011002 COW SLOUGH		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1Cd) according to USFWS's NWI, and Cropland and Pastureland (210), and Freshwater Marshes (641) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, while transportation (SR 70) borders the north.	Wetland 36 is unique to the surrounding landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Eastern lubber grasshopper (*Romalea microptera*), golden silk orb-weaver (*Trichonephila clavipes*), animal paths in grasses throughout wetland, songbirds in willows (*Salix* spp.), monarch butterfly (*Danaus plexippus*).

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	19-Sep-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-993-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, Liliana Sikes	19-Sep-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain. There are hydric soils mapped within this wetland: Basinger Fine Sand (0-2 percent slopes), and Samsula Muck (0-1 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to to other habitats.	4	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	4	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field observations include slow moving water where water is standing. Portions of the wetland can be characterized as grass mats with little to no standing water. The wetland vegetation was dominated by willow (Salix caroliniana), Brazillian pepper (*Schinus terebinthifolia* , FISC Cat I), and herbaceous vegetation such as peruvian primrose-willow (*Ludwigia peruviana* , FISC Cat I) and mexican primrose-willow (*Ludwigia octovalvis*). Few trees were present (Sabel palmettos (*Sabel palmetto*)). Portions of the wetland with slow moving, standing water contained emergent vegetation such as cattail (*Typha* spp.), lanceleaf arrowhead (*Sagittaria lancifolia*), and pickerelweed (*Pontedaria cordata*).	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.4	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0036

Delta = [with-current]
-0.4

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-993-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Secondary Impact	0.043 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
31001011002 COW SLOUGH		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1Cd) according to USFWS's NWI, and Cropland and Pastureland (210), and Freshwater Marshes (641) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, while transportation (SR 70) borders the north.	Wetland 36 is unique to the surrounding landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Eastern lubber grasshopper (*Romalea microptera*), golden silk orb-weaver (*Trichonephila clavipes*), animal paths in grasses throughout wetland, songbirds in willows (*Salix* spp.), monarch butterfly (*Danaus plexippus*).

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	19-Sep-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-993-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, Liliana Sikes	19-Sep-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain. There are hydric soils mapped within this wetland: Basinger Fine Sand (0-2 percent slopes), and Samsula Muck (0-1 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by agricultural land with moderate connectivity to to other habitats.	4	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	4	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field observations include slow moving water where water is standing. Portions of the wetland can be characterized as grass mats with little to no standing water. The wetland vegetation was dominated by willow (Salix caroliniana), Brazillian pepper (*Schinus terebinthifolia* , FISC Cat I), and herbaceous vegetation such as peruvian primrose-willow (*Ludwigia peruviana* , FISC Cat I) and mexican primrose-willow (*Ludwigia octovalvis*). Few trees were present (Sabel palmettos (*Sabel palmetto*)). Portions of the wetland with slow moving, standing water contained emergent vegetation such as cattail (*Typha* spp.), lanceleaf arrowhead (*Sagittaria lancifolia*), and pickerelweed (*Pontedaria cordata*).	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.4	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0172

Delta = [with-current]
-0.4

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-942-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Permanent Impact	0.87 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
31001011002 COW SLOUGH; 031001011001 LONG POINT MARSH; 030901030103 WEST BRANCH OF FISHEATING CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70 towards the eastern side. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1Fd) according to USFWS's NWI. Wetland is classified as Vegetated Non-Forested Wetland (640) and Freshwater Marshes (641) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, other open lands (rural), vegetated non-forested wetlands, and freshwater marshes.	This wetland is unique to the surrounding landscape

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Night heron (*Nycticorax nycticorax*) was observed eating a fish, a great blue heron (*Ardea herodias*), a turtle (*Trachemys spp.*), a cattle egret (*Bubulcus ibis*), a red-shouldered hawk (*Buteo lineatus*), and a belted kingfisher (*Megaceryle alcyon*) were also observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	29-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-992-L
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	29-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 4	with: 0	Wetland is located on the south side of SR 70 towards the eastern side of segment 10. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain.There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes), Basinger Fine Sand (0-2 percent slopes), and Samsula Muck (0-1 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate-good connectivity to to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 0	Field observations include fast to moderately fast moving water. The wetland vegetation was dominated by herbaceous vegetation such as west indian marsh grass (Hymenachne amplexicaulis, FISC Cat 1), pennywort *(Hydrocotyle umbellata*), duck potato (*Sagittaria lancifolia*), water lettuce (*Pistia stratiotes*), peruvian primrose (*Ludwigia peruviana*), maidencane (Hymenachne hemitomon), willow (*Saslix caroliniana*), wax myrtle (*Myrica cerifera*), and alligator flag (*Thalia geniculata*). Other vegetation noted includes sabel palm (Sabel palmetto), spider lily (*Hymenocallis spp* .), caesar weed (*Urena lobata*), and fern (*Polypodiopsida spp.*).

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.4	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.348

Delta = [with-current]
-0.4

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-942-R

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marshes (FDOT FLUCFCS)	Secondary Impact	0.06 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
31001011002 COW SLOUGH; 031001011001 LONG POINT MARSH; 030901030103 WEST BRANCH OF FISHEATING CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetland is located on the south side of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain.

Assessment area description

Wetland is classified as a Freshwater Emergent Wetland (PEM1Fd) according to USFWS's NWI. Wetland is classified as Vegetated Non-Forested Wetland (640) and Freshwater Marshes (641) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by cropland and pastureland, other open lands (rural), vegetated non-forested wetlands, and freshwater marshes.	This wetland is unique to the surrounding landscape

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Night heron (*Nycticorax nycticorax*) was observed eating a fish, a great blue heron (*Ardea herodias*), a turtle (*Trachemys spp.*), a cattle egret (*Bubulcus ibis*), a red-shouldered hawk (*Buteo lineatus*), and a belted kingfisher (*Megaceryle alcyon*) were also observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	29-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-942-R
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	29-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 with: 0	Wetland is located on the south side of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain.There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes), Basinger Fine Sand (0-2 percent slopes), and Samsula Muck (0-1 percent slopes). Wetland will be impacted by widening of ROW and construction of new lanes on SR 70. This wetland is surrounded by cropland and transportation with moderate-good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 5 with: 0	Field observations include fast to moderately fast moving water. The wetland vegetation was dominated by herbaceous vegetation such as west indian marsh grass (Hymenachne amplexicaulis, FISC Cat 1), pennywort *(Hydrocotyle umbellata*), duck potato (*Sagittaria lancifolia*), water lettuce (*Pistia stratiotes*), peruvian primrose (*Ludwigia peruviana*), maidencane (Hymenachne hemitomon), willow (*Saslix caroliniana*), wax myrtle (*Myrica cerifera*), and alligator flag (*Thalia geniculata*). Other vegetation noted includes sabel palm (Sabel palmetto), spider lily (*Hymenocallis spp* .), caesar weed (*Urena lobata*), and fern (*Polypodiopsida spp.*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.4 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres = -0.024

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.4	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		**WL-FPC 1002-NA**

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCCS)	Freshwater Marshes (FDOT FLUCCS)	Permanent Impact	0.17858 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is on the north side of SR 70. This wetland is connected to a freshwater emergent wetland and is within a 100 year floodplain.

Assessment area description

This wetland is classified as a Riverine (R5UBH) according to the USFWS's NWI and is classified as Freshwater Marshes (641) by FDOT's FLUCCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anserifromes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), bufferflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill *(Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

An anhinga (*Anhinga anhinga*), a southeastern five-lined skink (*Plestiodon inexpectatus*), and cattle were observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1002-NA
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	On the north side of SR 70. This wetland is connected to a freshwater emergent wetland and is within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes), Valkaria Fine Sand (0-2 percent slopes). Wetland will be impacted by the construction of a stormwater management facility.This wetland is surrounded by cropland and pastureland, as well as transportation with moderate-good connectivity to to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Banks are steep, erosion is present along the banks. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	2	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	NWI Classification - Riverine (R5UBH) Field observations include slow moving water, anhinga (*Anhinga anhinga*), and cattle. The wetland vegetation was dominated by herbaceous vegetation such as spikerush (*Eleocharis spp* .), spatterdock (*Nuphar advena*), water spangles (*Salvinia ssp.*), madiencane (*Hymenachne hemitomon*), Mexican primrose (*Ludwigia octovalis*), hyacinth (*Eichornia crassipes*), willow (*Salix caroliniana*), west indian marsh grass (*Hymenachne amplexicaulis*), and occasional sweetgum trees (*Liquidambar styraciflua*) along the edge and oak trees (*Quercus spp* .).	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.3	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.053574

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		**WL-FPC 1002-NA**

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCCS)	Freshwater Marshes (FDOT FLUCCS)	Secondary Impact	0.020 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is on the north side of SR 70. This wetland is connected to a freshwater emergent wetland and is within a 100 year floodplain.

Assessment area description

This wetland is classified as a Riverine (R5UBH) according to the USFWS's NWI and is classified as Freshwater Marshes (641) by FDOT's FLUCCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anserifromes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), bufferflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill *(Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

An anhinga (*Anhinga anhinga*), a southeastern five-lined skink (*Plestiodon inexpectatus*), and cattle were observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1002-NA
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 with: 0	On the north side of SR 70. This wetland is connected to a freshwater emergent wetland and is within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes), Valkaria Fine Sand (0-2 percent slopes). Wetland will be impacted by the construction of a stormwater management facility.This wetland is surrounded by cropland and pastureland, as well as transportation with moderate-good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 2 with: 0	Within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Banks are steep, erosion is present along the banks. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 4 with: 0	NWI Classification - Riverine (R5UBH) Field observations include slow moving water, anhinga (*Anhinga anhinga*), and cattle. The wetland vegetation was dominated by herbaceous vegetation such as spikerush (*Eleocharis spp* .), spatterdock (*Nuphar advena*), water spangles (*Salvinia ssp.*), madiencane (*Hymenachne hemitomon*), Mexican primrose (*Ludwigia octovalis*), hyacinth (*Eichornia crassipes*), willow (*Salix caroliniana*), west indian marsh grass (*Hymenachne amplexicaulis*), and occasional sweetgum trees (*Liquidambar styraciflua*) along the edge and oak trees (*Quercus spp* .).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres = -0.006

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1002-SB

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCFCS)	Freshwater Marsh (FDOT FLUCFCS)	Permanent Impact	0.416 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the south side of SR 70. The wetland is east of SE Turkey Hammock Road. The wetland is within a 100 year floodplain.

Assessment area description

Classified as a Freshwater Emergent Wetland (PEM1Fd) according to USFWS's NWI and is classified as Freshwater Marshes (641) according to FDOT FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by crops and pastureland.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	October 23rd, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1002-SB
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	This wetland is located on the south side of SR 70. The wetland is east of SE Turkey Hammock Road. The wetland is within a 100 year floodplain.There is hydric soil mapped within this wetland, Basinger Fine Sand (0-2 percent slopes). It will be impacted by the construction of a stormwater managment facility. This wetland is surrounded by agricultural land with moderate to low connectivity to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	NWI Classification - Freshwater Emergent Wetland (PEM1Fd) FLUCCs - Freshwater Marsh (641) Dominated by grass spp. and spikerush (*Eleocharis spp.*).	2	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.26667	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.111072

Delta = [with-current]
-0.266666667

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1002-SB

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCCS)	Freshwater Marsh (FDOT FLUCFCS)	Secondary Impact	0.179 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the south side of SR 70. The wetland is east of SE Turkey Hammock Road. The wetland is within a 100 year floodplain.

Assessment area description

Classified as a Freshwater Emergent Wetland (PEM1Fd) according to USFWS's NWI and is classified as Freshwater Marshes (641) according to FDOT FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by crops and pastureland.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	October 23rd, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1002-SB
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	October 23rd, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	This wetland is located on the south side of SR 70. The wetland is just east of SE Turkey Hammock Road. The wetland is within a 100 year floodplain.There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes) and Basinger Fine Sand (0-2 percent slopes). It will be impacted by the construction of a stormwater managment facility. This wetland is surrounded by agricultural land with moderate to low connectivity to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	NWI Classification - Freshwater Emergent Wetland (PEM1Fd) FLUCCs - Freshwater Marsh (641) Dominated by grass spp. and spikerush (*Eleocharis spp.*).	2	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.26667	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.047793

Delta = [with-current]
-0.266666667

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1003A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCCS)	Freshwater Marshes (FDOT FLUCCS)	Permanent Impact	0.499 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is on the south side of SR 70. Connected wetlands extend north and south. This wetland is located within a 100 year floodplain.

Assessment area description

Classified as a Freshwater Emergent Wetland (PEM1Cd) according to USFWS's NWI and as Freshwater Marshes (641) according to FDOT's FLUCCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (Alligator mississippiensis) - FT (S/A); Little blue heron (Egretta caerulea) - ST; Roseate spoonbill (Platalea ajaja) - ST; Tricolored heron (Egretta tricolor) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	27-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1003A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	27-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	This wetland is on the south side of SR 70. Connected wetlands extend north and south. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by construction of a stormwater management facility. This wetland is surrounded by cropland and transportation with moderate-poor connectivity to to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), water lettuce (*Pistia stratiotes*), pennywort (*Hydrocotyle spp* .), spatterdock (*Nuphar advena*), saw palmetto (*Serenoa repens*), torpedo grass (*Panicum repens*), cabbage palm (*Sabal palmetto*), and Brazillian pepper (*Schinus terebinthifolia*).	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.33333	0

Delta = [with-current]
-0.333333333

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = -0.16617

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1003A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCCS)	Freshwater Marshes (FDOT FLUCCS)	Secondary Impact	0.409 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is on the south side of SR 70. Connected wetlands extend north and south. This wetland is located within a 100 year floodplain.

Assessment area description

Classified as a Freshwater Emergent Wetland (PEM1Cd) according to USFWS's NWI and as Freshwater Marshes (641) according to FDOT's FLUCCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (Alligator mississippiensis) - FT (S/A); Little blue heron (Egretta caerulea) - ST; Roseate spoonbill (Platalea ajaja) - ST; Tricolored heron (Egretta tricolor) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	27-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1003A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	27-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	This wetland is on the south side of SR 70. Connected wetlands extend north and south. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland, Malabar Fine Sand (0-2 percent slopes). Wetland will be impacted by construction of a stormwater management facility. This wetland is surrounded by cropland and transportation with moderate-poor connectivity to to other habitats.	3	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	3	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), water lettuce (*Pistia stratiotes*), pennywort (*Hydrocotyle spp* .), spatterdock (*Nuphar advena*), saw palmetto (*Serenoa repens*), torpedo grass (*Panicum repens*), cabbage palm (*Sabal palmetto*), and Brazillian pepper (*Schinus terebinthifolia*).	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.33333	0

Delta = [with-current]
-0.333333333

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = -0.1362

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1006A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCCS)	Freshwater Marshes	Permanent Impact	0.204 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is on the south side of SR 70. Connected wetlands extend north and south. This wetland is located within a 100 year floodplain.

Assessment area description

Classified as a Freshwater Emergent Wetland (PEM1Cd) according to USFWS's NWI and as Freshwater Marshes (641) according to FDOT's FLUCCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	August 14, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1006A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	August 14, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 — with: 0	This wetland is on the south side of SR 70 and is located within a 100 year floodplain. There is hydric soil mapped within this wetland - Valkaria Fine Sand (0 to 2 percent slopes). Wetland will be impacted construction of a stormwater management facility. This wetland is surrounded by cropland with moderate-poor connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 — with: 0	Portions are located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 3 — with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), pennywort (*Hydrocotyle umbellata*), lanceleaf arrowhead (*Sagittaria lancifolia*), and dog fennel (*Eupatorium capillifolium*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0612
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1006A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641 (FDOT FLUCCS)	Freshwater Marshes	Secondary Impact	0.019 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is on the south side of SR 70. Connected wetlands extend north and south. This wetland is located within a 100 year floodplain.

Assessment area description

Classified as a Freshwater Emergent Wetland (PEM1Cd) according to USFWS's NWI and as Freshwater Marshes (641) according to FDOT's FLUCCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	August 14, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1006A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	August 14, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 3 — with: 0	This wetland is on the south side of SR 70 and is located within a 100 year floodplain. There is hydric soil mapped within this wetland - Valkaria Fine Sand (0 to 2 percent slopes) Wetland will be impacted construction of a stormwater management facility. This wetland is surrounded by cropland with moderate-poor connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 — with: 0	Portions are located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 3 — with: 0	Field observations include slow moving water. The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), pennywort (*Hydrocotyle umbellata*), lanceleaf arrowhead (*Sagittaria lancifolia*), and dog fennel (*Eupatorium capillifolium*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.3 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.0057
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.3	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1007C

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCCS)	Vegetated Non-Forested Wetlands (640)	Permanent Impact	0.095 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain.

Assessment area description

Classified as a Riverine (R5UBFx) according to USFWS's NWI and Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
The wetland is surrounded by cropland and pastureland	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	15-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1007C
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	15-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Located on the south side of SR 70. The wetland is within a 100 year floodplain. It will be impacted by the construction of a stormwater management facility. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	Field observations include flowing moving water. The wetland vegetation was dominated by herbaceous and woody vegetation such as maidencane (*Panicum hemitomon*), caesar weed (Urena lobata), brazillian pepper (*Schinus terebinthifolia*), west indian marsh grass (*Hymenachne amplexicaulis*), willow (*Salix spp.*), mexican primrose-willow (*Ludwigia octovalis*).

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.3	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.029

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1007C

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCCS)	Vegetated Non-Forested Wetlands (640)	Secondary Impact	0.013 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain.

Assessment area description

Classified as a Riverine (R5UBFx) according to USFWS's NWI and Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
The wetland is surrounded by cropland and pastureland	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	15-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1007C
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	15-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Located on the south side of SR 70. The wetland is within a 100 year floodplain.It will be impacted by the construction of a stormwater management facility. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	Field observations include flowing moving water. The wetland vegetation was dominated by herbaceous and woody vegetation such as maidencane (*Panicum hemitomon*), caesar weed (Urena lobata), brazillian pepper (*Schinus terebinthifolia*), west indian marsh grass (*Hymenachne amplexicaulis*), willow (*Salix spp.*), mexican primrose-willow (*Ludwigia octovalis*).

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.3	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0039

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1008A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCCS)	Vegetated Non-Forested Wetlands (640)	Permanent Impact	0.340 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain.

Assessment area description

Classified as a Riverine (R5UBFx) according to USFWS's NWI and Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
The wetland is surrounded by cropland and pastureland	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	15-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1008A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	15-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Located on the south side of SR 70. The wetland is within a 100 year floodplain. It will be impacted by the construction of a stormwater management facility. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	Field observations include flowing moving water. The wetland vegetation was dominated by herbaceous and woody vegetation such as maidencane (*Panicum hemitomon*), caesar weed (Urena lobata), brazillian pepper (*Schinus terebinthifolia*), west indian marsh grass (*Hymenachne amplexicaulis*), willow (*Salix spp.*), mexican primrose-willow (*Ludwigia octovalis*).

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.3	with: 0

Delta = [with-current]
-0.3

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = -0.102

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1008A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCCS)	Vegetated Non-Forested Wetlands (640)	Secondary Impact	0.179 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the south side of SR 70. The wetland is within a 100 year floodplain.

Assessment area description

Classified as a Riverine (R5UBFx) according to USFWS's NWI and Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
The wetland is surrounded by cropland and pastureland	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	15-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-FPC 1008A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	15-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0	Located on the south side of SR 70. The wetland is within a 100 year floodplain. It will be impacted by the construction of a stormwater management facility. This wetland is surrounded by agricultural land with moderate connectivity to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table near the land surface. Some petroleum from the road and fertilizer run-off from agricultural land that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	Field observations include flowing moving water. The wetland vegetation was dominated by herbaceous and woody vegetation such as maidencane (*Panicum hemitomon*), caesar weed (Urena lobata), brazillian pepper (*Schinus terebinthifolia*), west indian marsh grass (*Hymenachne amplexicaulis*), willow (*Salix spp.*), mexican primrose-willow (*Ludwigia octovalis*).

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.3	with: 0

Delta = [with-current]
-0.3

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = -0.0537

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1010B

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCCS)	Vegetated Non-Forested Wetlands (640)	Permanent Impact	0.302 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011001 LONG POINT MARSH		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the south side of SR 70. This wetland is connected to a riverine wetland and located within a 100 year floodplain.

Assessment area description

Classified as a Riverine (R2UBHx) according to USFWS's NWI and Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland and other open lands (rural)	This wetland is unique to the surrounding landscape

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Night heron (*Nycticorax nycticorax*) was observed eating a fish, a great blue heron (*Ardea herodias*), a turtle (*Trachemys spp.*), a cattle egret (*Bubulcus ibis*), a red-shouldered hawk (*Buteo lineatus*), and a belted kingfisher (*Megaceryle alcyon*) were also observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	29-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1010B
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	29-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 with: 0	This wetland is located on the south side of SR 70. This wetland is located within a 100 year floodplain.There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes). Wetland will be impacted by construction of a stormwater management facility. This wetland is surrounded by cropland and transportation with moderate-good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 with: 0	Located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 5 with: 0	Field observations include fast to moderately fast moving water. The wetland vegetation was dominated by herbaceous vegetation such as west indian marsh grass (Hymenachne amplexicaulis, FISC Cat 1), pennywort *(Hydrocotyle umbellata*), duck potato (*Sagittaria lancifolia*), water lettuce (*Pistia stratiotes*), peruvian primrose (*Ludwigia peruviana*), maidencane (Hymenachne hemitomon), willow (*Saslix caroliniana*), wax myrtle (*Myrica cerifera*), and alligator flag (*Thalia geniculata*). Other vegetation noted includes sabel palm (Sabel palmetto), spider lily (*Hymenocallis spp* .), caesar weed (*Urena lobata*), and fern (*Polypodiopsida spp.*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.4 with: 0	Preservation adjustment factor = Adjusted mitigation delta =	FL = delta x acres = -0.1208

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.4	Time lag (t-factor) = Risk factor =	RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1010B

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCCS)	Vegetated Non-Forested Wetlands (640)	Secondary Impact	0.735 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011001 LONG POINT MARSH		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the south side of SR 70. This wetland is connected to a riverine wetland and located within a 100 year floodplain.

Assessment area description

Classified as a Riverine (R2UBHx) according to USFWS's NWI and Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland and other open lands (rural)	This wetland is unique to the surrounding landscape

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Night heron (*Nycticorax nycticorax*) was observed eating a fish, a great blue heron (*Ardea herodias*), a turtle (*Trachemys spp.*), a cattle egret (*Bubulcus ibis*), a red-shouldered hawk (*Buteo lineatus*), and a belted kingfisher (*Megaceryle alcyon*) were also observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	29-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		FPC 1010B
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	29-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 4	with: 0	This wetland is located on the south side of SR 70. This wetland is located within a 100 year floodplain.There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes). Wetland will be impacted by construction of a stormwater management facility. This wetland is surrounded by cropland and transportation with moderate-good connectivity to to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	Located within 100 year floodplain. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 0	Field observations include fast to moderately fast moving water. The wetland vegetation was dominated by herbaceous vegetation such as west indian marsh grass (Hymenachne amplexicaulis, FISC Cat 1), pennywort *(Hydrocotyle umbellata*), duck potato (*Sagittaria lancifolia*), water lettuce (*Pistia stratiotes*), peruvian primrose (*Ludwigia peruviana*), maidencane (Hymenachne hemitomon), willow (*Saslix caroliniana*), wax myrtle (*Myrica cerifera*), and alligator flag (*Thalia geniculata*). Other vegetation noted includes sabel palm (Sabel palmetto), spider lily (*Hymenocallis spp* .), caesar weed (*Urena lobata*), and fern (*Polypodiopsida spp.*).

Score = sum of above scores/30 (if uplands, divide by 20)		
current or w/o pres: 0.4	with: 0	

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.294

Delta = [with-current]
-0.4

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 0902A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
615 (FDOT FLUCFCS)	Streams and Lake Swamps (Bottomland) (FDOT FLUCFCS)	Permanent Impact	0.6877 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is on the south of SR 70. This wetland is connected to a riverine wetland and is located within a 100 year floodplain.

Assessment area description

Classified as a Freshwater Forested/Shrub Wetland (PFO1Fd) and a Riverine (R5UBH) according to the USFWS' NWI and as Streams and Lake Swamps (Bottomland) (615) according to FDOT's FLUCCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by open land to the left and residential to the south and east.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron *(Egretta caerulea*) - ST; Roseate spoonbill *(Platalea ajaja)* - ST; Tricolored heron *(Egretta tricolor)* - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	July 11, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 0902A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	July 11, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Located on the south of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland; Basinger Fine Sand (0-2 percent slopes). This wetland will be impacted by the construction of a stormwater management facility. This wetland has open land to the west with good connectivity to to other habitats.	4	0
.500(6)(b)Water Environment (n/a for uplands)	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from residential land that could potentially cause algal blooms and water quality degradation.	5	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Field observations include slow moving water. The wetland vegetation was dominated by caesar weed (*Urena lobata*), fern (*Polypodiopsida spp* .), and saw palmetto (*Serenoa repens*).	6	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.5	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.343828

Delta = [with-current]
-0.5

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 0902A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
615 (FDOT FLUCFCS)	Streams and Lake Swamps (Bottomland) (FDOT FLUCFCS)	Secondary Impact	0.344 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001010904 LOWER JOSHUA CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is on the south of SR 70. This wetland is connected to a riverine wetland and is located within a 100 year floodplain.

Assessment area description

Classified as a Freshwater Forested/Shrub Wetland (PFO1Fd) and a Riverine (R5UBH) according to the USFWS' NWI and as Streams and Lake Swamps (Bottomland) (615) according to FDOT's FLUCCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Wetland is surrounded by open land to the left and residential to the south and east.	Not unique to relative landscape.

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron *(Egretta caerulea*) - ST; Roseate spoonbill *(Platalea ajaja)* - ST; Tricolored heron *(Egretta tricolor)* - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Katherine Lawlor, and Liliana Sikes	July 11, 2024

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 0902A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	July 11, 2024

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 4 — with: 0	Located on the south of SR 70. This wetland is connected to a riverine wetland. This wetland is located within a 100 year floodplain. There is hydric soil mapped within this wetland; Basinger Fine Sand (0-2 percent slopes). This wetland will be impacted by the construction of a stormwater management facility. This wetland has open land to the west with good connectivity to to other habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 5 — with: 0	Located within 100 year floodplain along this wetland. This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from residential land that could potentially cause algal blooms and water quality degradation.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 6 — with: 0	Field observations include slow moving water. The wetland vegetation was dominated by caesar weed (*Urena lobata*), fern (*Polypodiopsida spp* .), and saw palmetto (*Serenoa repens*).	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.5 — with: 0	Preservation adjustment factor =	FL = delta x acres = -0.172
	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.5	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 1006A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCFCS)	Vegetated Non-Forested Wetland	Permanent Impact	0.019 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011006 UPPER PRAIRIE CREEK		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the south side of SR 70. The wetland is isolated and is not connected to any other wetlands.

Assessment area description

Not classified as a wetland according to USFWS's NWI; however, it is nearby a Freshwater Emergent Wetland (PEM1Fx) and is classified as Vegetated Non-Forested Wetland (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland. It is located approximately 1.4 miles east of the entrance to the Florida Corrections Academy.	Not unique to relative landscape.
Functions	**Mitigation for previous permit/other historic use**
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	**Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the**
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea*) - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

No wildlife utilization observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	14-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 1006A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	14-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 3	with: 0
Located on the south side of SR 70. The wetland is isolated and is not connected to any other wetlands. There is no hydric soil mapped within this wetland. Wetland will be impacted by the construction of a stormwater management facility. This wetland is surrounded by cropland and transportation with moderate-poor connectivity to to other habitats.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0
This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0
The wetland vegetation was dominated by herbaceous vegetation such as maidencane (*Hymenachne hemitomon*), and alligator flag (*Thalia geniculata*).		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.3	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0162

Delta = [with-current]
-0.3

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 1009A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCCS)	Vegetated Non-Forested Wetlands (640)	Permanent Impact	0.124 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011001 Long Point Marsh		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the north side of SR 70. This wetland is connected to a riverine wetland.

Assessment area description

Classified as a Riverine (R2UBHx) according to USFWS's NWI and Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland and other open lands (rural).	This wetland is unique to the surrounding landscape

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Night heron (*Nycticorax nycticorax*) was observed eating a fish, a great blue heron (*Ardea herodias*), a turtle (*Trachemys spp.*), a cattle egret (*Bubulcus ibis*), a red-shouldered hawk (*Buteo lineatus*), and a belted kingfisher (*Megaceryle alcyon*) were also observed during field reconnaissance.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	29-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 1009A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Permanent Impact	James Fine, Katherine Lawlor, and Liliana Sikes	29-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 4	with: 0	Located on the north side of SR 70. This wetland is connected to a riverine wetland. There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes). Wetland will be impacted by the construction of a stormwater management facility. This wetland is surrounded by cropland and transportation with moderate-good connectivity to to other habitats.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0	This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 0	Field observations include fast to moderately fast moving water. The wetland vegetation was dominated by herbaceous vegetation such as west indian marsh grass (Hymenachne amplexicaulis, FISC Cat 1), pennywort *(Hydrocotyle umbellata*), duck potato (*Sagittaria lancifolia*), water lettuce (*Pistia stratiotes*), peruvian primrose (*Ludwigia peruviana*), maidencane (Hymenachne hemitomon), willow (*Saslix caroliniana*), wax myrtle (*Myrica cerifera*), and alligator flag (*Thalia geniculata*). Other vegetation noted includes sabel palm (Sabel palmetto), spider lily (*Hymenocallis spp* .), caesar weed (*Urena lobata*), and fern (*Polypodiopsida spp.*).

Score = sum of above scores/30 (if uplands, divide by 20)		
current or w/o pres: 0.4	with: 0	

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.0496

Delta = [with-current]
-0.4

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 1009A

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (FDOT FLUCCS)	Vegetated Non-Forested Wetlands (640)	Secondary Impact	0.051 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
031001011001 Long Point Marsh		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This wetland is located on the north side of SR 70. This wetland is connected to a riverine wetland.

Assessment area description

Classified as a Riverine (R2UBHx) according to USFWS's NWI and Vegetated Non-Forested Wetlands (640) according to FDOT's FLUCFCS.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the
Surrounded by cropland and pastureland and other open lands (rural).	Not unique

Functions	Mitigation for previous permit/other historic use
Wetlands serve functions such as improving water quality, replenishing the groundwater, flood and erosion control, and food and habitat for wildlife.	No

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the
Fish, waterfowl and raptors (Order Anseriformes), large and small reptiles including alligators, snakes, and turtles (Class Reptilia), amphibians including frogs (Class Amphibia), butterflies and moths (Order Lepidoptera), wasps, bees, and ants (Order Hymenoptera)	American alligator (*Alligator mississippiensis*) - FT (S/A); Little blue heron (*Egretta caerulea)* - ST; Roseate spoonbill (*Platalea ajaja*) - ST; Tricolored heron (*Egretta tricolor*) - ST

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
James Fine, Liliana Sikes, and Katherine Lawlor	29-Aug-24

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPID: 451942-1-22-01		WL-SMF 1009A
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Secondary Impact	James Fine, Katherine Lawlor, and Liliana Sikes	29-Aug-24

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 4	with: 0
Located on the north side of SR 70. This wetland is connected to a riverine wetland. There is hydric soil mapped within this wetland, Valkaria Fine Sand (0-2 percent slopes). Wetland will be impacted by the construction of a stormwater management facility. This wetland is surrounded by cropland and transportation with moderate-good connectivity to to other habitats.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 3	with: 0
This wetland system is characterized as having water present throughout the growing season most years, with the water table usually at or very near the land surface. Some petroleum from the road and fertilizer run-off from cropland and pastureland that could potentially cause algal blooms and water quality degradation.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 0
Field observations include fast to moderately fast moving water. The wetland vegetation was dominated by herbaceous vegetation such as west indian marsh grass (Hymenachne amplexicaulis, FISC Cat 1), pennywort *(Hydrocotyle umbellata*), duck potato (*Sagittaria lancifolia*), water lettuce (*Pistia stratiotes*), peruvian primrose (*Ludwigia peruviana*), maidencane (Hymenachne hemitomon), willow (*Saslix caroliniana*), wax myrtle (*Myrica cerifera*), and alligator flag (*Thalia geniculata*). Other vegetation noted includes sabel palm (Sabel palmetto), spider lily (*Hymenocallis spp* .), caesar weed (*Urena lobata*), and fern (*Polypodiopsida spp.*).		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.4	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.0204

Delta = [with-current]
-0.4

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =