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IFB NO. Y18-781-RM	ISSUED: June 25, 2018	
	INVITATION FOR BIDS	
	FOR	
	NIFORM WATERWAY MARKER INSTALLATION	
	PART H TECHNICAL SPECIFICATIONS	

PART H Volume II		

PART H TECHNICAL PROVISIONS

BACKGROUND

Orange County (County) maintains a Florida Fish and Wildlife Conservation Commission (FWC) Florida Uniform Waterway Marker permit that establishes boating safety zones on 3 chains of lakes, and is responsible for the management of approximately 100 waterway markers. This bid will include the removal of all existing uniform waterway markers, driving new pilings, and providing other associated hardware for new sign panels (Project) provided by Orange County. The exact specifications are provided below. The markers associated with this project mark state-adopted boating safety zones and must adhere to the requirements of Section 327.40, 327.41, 327.46 (Florida Statute) & Chapter 68D-23, Florida Administrative Code.

In summary, the work associated with this Project will include:

- Pile installation –New timber pilings will be installed as designated in the Location
 Assignment and the Marker Records, and attach up to four (4) sign panels (sign panels
 provided by Orange County) with associated hardware, cross members, pile cap and
 reflective tape.
- **Pile removal** Existing piles, adjacent to the new pilings locations, will be simultaneously removed as indicated in the Location Assignment. This includes the complete removal of the pile along with associated sign panel(s) and hardware.

Specifications for the piling design are provided as a drawing in Appendix 1. The specifications for each Location Assignment are provided in Appendix 2, maps showing the approximate marker locations of each Location Assignment are provided in Appendix 3, and Location Assignment ramp access locations and staging areas are provided in Appendix 4.

The following technical specifications cover the work to be performed involving all types of waterway markers involved in this contract. Orange County will issue a Location Assignment detailing the services required at each location and the schedule for completion. Work under this contract will be limited to the work specified in a Location Assignment. The Vendor shall complete all construction in accordance with the Location Assignment (Appendix 2) and Signage Technical Specifications (Appendix 1).

Unless otherwise stated, Orange County will provide all sign panels associated with the project. It is expected for the Vendor to provide piling tape, cross members, hardware associated with the piles and cross members, pile caps, and install the sign panels.

All sign installations shall conform to the Florida Uniform Waterway Marking System in accordance with Florida Statutes 327.40(1). Uniform waterway marker details (drawings) will be provided to all registered participants prior to the pre-bid conference.

PILES

TYPES

- 1. Treated Wood Timber Piles: Standard treated wood timber piles shall be 8" to 10" in diameter unless otherwise indicated. The timber piles shall be pressure treated with Chromated Copper Arsenate (0.80), Alkaline Copper Quaternary (0.80), or Ammoniacal Copper Zinc Arsenate (1.0). Piles shall be carefully handled with no sudden dropping, breaking of outer fibers, bruising, or penetration of the surface with tools. Bolt holes shall be bored 1/8" larger than the diameter of the bolt. Any piles which require excessive bending in order to frame properly shall be withdrawn and reinstalled to the proper batter. Piles shall not be installed and then pulled into position. Minor adjustment (less than three-degrees to vertical) is allowed after pile installation; however, the Vendor is fully responsible to ensure soil has settled around the pile so that no listing will occur. Piles damaged, not located in the proper location, or driven out of alignment shall be withdrawn and replaced by new piles or shall be cut off at the mud-line and additional piles installed as directed, all without additional cost to Orange County. The maximum permissible deviation for piles out of plumb or off batter shall be two-percent of the pile length, and the pile spacing will vary no more than 6" from the spacing specified in the marker details. The Vendor will field verify the water depth at the proposed coordinates prior to purchase of pile materials.
- 2. Long Piles: Piles longer than 25' may be needed to meet pile installation specifications above due to water depth level. There also may be instances where a larger diameter pile than specified above is required for a particular application. In these cases, the Vendor will need to field verify the water depth prior to gathering materials. Lake bathymetry maps will be provided at bidder's request. When handling and driving long piles of a high slenderness ratio, the Vendor shall take special precautions to ensure against overstress or leading away from plumb or true position when driving. The Vendor will field verify the water depth at the proposed coordinates prior to purchase of pile materials.

INSTALLATION STANDARDS

A design drawing showing the installation requirements is included in Appendix 1.

1. Pile Driving Equipment: Free-swinging leads will not be permitted. Pile drivers shall have fixed leads at the top and bottom, extending to the lowest point the hammer must reach. Pile-driving hammers shall be of a size and type to deliver consistently effective dynamic energy suitable for the type and capacity of the piles to be driving and the material into which they are to be driven.

2. Pile Driving: While the new pilings are installed as designated in the Location Assignment, the existing pilings at the same location will simultaneously be removed as indicated in the Location Assignment. Punching or drilling holes will be allowed when necessary to permit piles to pass through those strata and reach required penetration. Blasting of holes for the piles will not be permitted. The Vendor shall drive all piles continuously and without voluntary interruption. After driving and back-driving, the Vendor shall cut piles at the cutoff grade line, and the surplus material shall be removed from the site of the work. Any piles requiring excessive bending in order to frame properly shall be withdrawn and re-driven to the proper batter. Driving batter piles vertically and then pulling them into position will not be permitted. Piles shall not be installed by excavating then backfilling and compacting. Minor adjustment (less than 3° to vertical) is allowed after pile installation; however, the Vendor is fully responsible to ensure soil has settled around the pile so that no listing will occur. Piles damaged, not located in the proper location, or driven out of alignment shall be withdrawn and replaced by new piles or shall be cut off at the mud-line and additional piles installed as directed, all without additional cost to Orange County.

Piles shall penetrate into the substrate at least six (6) feet for rock or limerock, eight (8) feet for sand and/or shell, or at least ten (10) feet or more for mud and muck, as appropriate, to support the marker. If rock is encountered, pre-drilling of the pile hole and/or a pile shoe may be required at no additional cost to Orange County. If an auguring or punching method is deemed necessary to install a pile into rock or hard substrate, the method must first be approved by Orange County. If these methods require grouting, the materials and methodology must also be approved by Orange County. Piles shall not be connected or joined together to lengthen.

Water jets may be used in driving only when specifically authorized in writing by Orange County. Where jetting is allowed by the Orange County, at least two (2) jets shall be used. All jetted piles shall be driven for the final five (5) feet of penetration, unless otherwise directed by Orange County.

Unless otherwise indicated in the Location Assignment, all installations include installation of sign panel(s), cross members and associated hardware, pile cap(s) and reflective white tape. Sign panels will be provided by Orange County. Sign or pile assemblies not completed at the end of each work day must be marked and made visible to day and nighttime waterway traffic with at least one reflective tape band. However, no more than two (2) pile assemblies (single or double) may be left unfinished at the end of each work day.

3. Pile Caps: Unless otherwise indicated, marker installations identified in the Assignment, are required to be capped with plastic pointed black caps attached with a minimum of four (4) $\#10 \times 1.5$ " stainless steel screws and be even with the top edge of the sign to ± 6 ". The cap shall fit the pile naturally without having to modify

- the pile cap in any fashion to forcefully fit the pile diameter (e.g. splitting a cap to fit a larger diameter pile than the cap was designed to fit).
- 4. Reflective Tape on Piles: The Vendor shall supply two (2) 6" wide bands of 3M diamond grade white very high intensity prismatic reflective tape with pressure sensitive backing and place them around each pile with a minimum of a 1" overlap (the entire 6" width of the tape), with the first band installed 6" from the bottom of the sign and the second band 8" below the bottom of the first band. All tape shall be firmly secured on the 1" overlap with a minimum of four (4) stainless steel staples at least 1" in length.

PILES - DAMAGE AND REMOVAL

- 1. Damaged or Displaced Piles: All existing piles will be removed and replaced with new piles in accordance with these specifications, unless otherwise directed in the Location Assignment. Orange County will make the final determination regarding placement of the pile and noted with the GPS coordinates and on an aerial map.
- 2. Pile Removal: Piles shall be removed by the Vendor at the locations indicated in the Location Assignment. The existing wood piles are typically 8" and 6" x 6" in diameter. The Vendor shall make every effort to remove each pile in its entirely by pulling or using a jet pump. Should the Vendor be unable to remove a pile, it may be cut, with the cut occurring at or below the mud line. If removal by cutting is required, the Vendor shall record the location and certify that the pile was cut at or below the mud line and provide the record in the Marker Records document.

SIGN PANELS

Sign panels must be installed as indicated on the Signage Technical Specifications Drawing (Appendix 1) with piles to be shortened as dictated by the normal mean high watermark in the area of installation unless otherwise specified in the Location Assignment. The bottom of all sign panels must be a minimum of three (3) feet above the mean high water elevation in the NAVD '88 datum and shall not exceed five (5) feet above the mean high water elevation. The Vendor will be required to secure a licensed surveyor to ensure the sign height meets this requirement. A signed and sealed surveys will be required for completion of the project and will contain each sign's horizontal and vertical locations (X,Y,Z), as well as submittal of a digital survey record. The method used to ensure the sign height is compliant must be documented in a field sheet for each piling. The County retains the right to veto any inadequate methodology used to ensure proper sign height.

Sign panels will not have pre-drilled holes. Most sign panels will be installed back-to-back on opposite sides of a pile. The Vendor shall not degrade the message area or the orange reflective surfaces of the sign panels when drilling holes or split the ends of the cross members on the backs of panels. The Vendor will replace, at its own expense, any sign panel that it damages during the delivery and installation process.

Sign panels will be constructed of 0.125 gauge, 5052-H38 aluminum, or higher with 2.25"-3.00" radius corners, and are produced using industry specifications for chemically treated aluminum to accommodate the marine environment and diamond grade reflective sheeting.

TYPES

1. Panel sizes: Sign panels provided will be 3' x 4' and auxiliary sign panels will be 1' x 4'.

• INSTALLATION STANDARDS

- 1. Cross Member Installation and Removal: Unless otherwise indicated in the Location Assignment, all 3' x 4' sign panel installations must include cross member support as shown on the waterway marker details (Appendix 1). Cross members are either a 2" x 4" or 4" x 4" lumber, are pressure treated, and additional 2" x 4" spacers may be required for specific sign installations. The lumber must meet or exceed the deflection of a standard treated timber and be guaranteed by the manufacturer. New hardware will be used and provided by the Vendor.
- 2. Hardware/Fasteners: Unless otherwise specified in the Location Assignment, all sign panels shall be drilled and fastened by full penetration of each pile/post by two (2) type 304 ¾" stainless steel through bolts or threaded rod, which must pass through each sign panel, the cross members and the pile/post and shall not extend more than 1" or less than ½" beyond a type 304 stainless steel hex-nut, stainless steel lock washer, and stainless steel flat washers. Sign panels will also be affixed to cross members using 3/8" x 1.5" stainless steel lag bolts and stainless steel lock washers, per the sign details (Appendix 1). A flat nylon washer will be placed between all stainless steel fasteners and the aluminum sign panels to prevent or minimize bimetallic corrosion. After a nut has been secured to a bolt or threaded rod, the last two or three threads of the bolt or rod must be bent in a manner to render the threads resistant to vandalism. Consideration should be given to ensuring that damage is not so significant as to render the hardware unusable should repairs need to be made in the future.
- 3. Sign Panels 3' x 4': All installations of 3' x 4' sign panels shall be mounted on one (1) pile. A 4" x 4" cross member shall be installed at the top and a 2" x 4" cross member shall be installed at the bottom on the back of all sign panels so the panel will be slanted out in accordance with the marker details.
- **4.** Auxiliary Signs (1' x 4'): All installations of 1' x 4' auxiliary sign panels shall be mounted as indicated in the marker details.

BUOYS

While the new pilings are installed as designated in the Location Assignment, the temporary buoys at the same location will simultaneously be removed as indicated in the Location

Assignment. The buoy anchors are not embedded into the substrate, the anchors sit on the surface of the substrate. The buoys will be delivered to the Orange County Warehouse at 6148 Hanging Moss Road, Suite 200, Orlando, FL, 32807. The County Warehouse is not manned and a delivery time will need to be coordinated with the Project Manager. Care will be taken by the Vendor so as not to damage the integrity and floatation capability of the buoys.

DISPOSAL OF REMOVED ITEMS

All items removed must be properly disposed of in compliance with all federal, state and local laws and ordinances, and the items and method of disposal will be identified in the Marker Records. Orange County is requesting to keep removed buoys for their future use.

AGENCY COORDINATION AND NOTIFICATION

Prior to the mobilization of equipment, the Vendor shall notify and coordinate with the appropriate agencies including, but not limited to: the U. S. Coast Guard (provide a Broadcast Notice for Mariners), FWC, and the Florida Department of Transportation.

PRE-CONSTRUCTION MEETING

The Vendor and Orange County will coordinate to conduct a pre-construction meeting to establish a working understanding among the parties as to lines of communication, the construction plan, work schedules, environmental conditions, equipment, specifications, procedures for potential additional work, procedures for processing invoices and maintenance of records. The Vendor will bring a detailed construction schedule, with start and end dates, to the meeting. Before the Notice to Proceed is issued, the Vendor will supply to the County the installation methods and specific materials will be used for the Project, to assist in a clear understanding of what is required for the Project.

TIMELY PERFORMANCE REQUIREMENTS

Timely performance is of the essence in the award of this Request for Quotations. Work is to commence within seven (7) days of Official Notice to Proceed date and shall be completed, unless amended by written Change Order or Amendment executed by both parties to this Contract. Quotes which fail to meet this requirement shall be rejected. It is hereby understood and mutually agreed to by and between parties hereto that the time of performance is an essential condition of this contract.

Substantial Completion of Work shall be achieved not later than ninety (90) consecutive calendar days from date of Official Notice to Proceed. The Project Manager will inspect the completed work and advise the Contractor of any corrections.

Final Completion of Work shall be achieved not later than one hundred and twenty (120) consecutive calendar days from the date of the Official Notice to Proceed.

DELIVERY, STORAGE AND HANDLING OF MATERIALS

The Vendor shall contact Orange County to coordinate retrieving the sign panels as specified in the Project. The signs will be available for pickup at EPD's warehouse located on Hanging Moss

Road, Suite 200, Orlando, FL 32807. Orange County will provide the Vendor with a detailed list and description of all items provided, and the Vendor will inspect the items to ensure they are accurate and received in good condition. The Vendor will notify Orange County of any problems in writing (email is acceptable) within five (5) business days of receipt. Once received and verified to be in good condition, the Vendor will be responsible for transporting all necessary equipment and materials to the Assignment Location work sites. The Vendor may be provided a staging area, at the County Warehouse and Assignment Location boat ramp (if necessary), to store and protect materials in preparation for and during construction activities. Materials may be staged in the EPD Warehouse and at specified boat ramp locations, as noted on Appendix 4. The Vendor is responsible for the purchase, delivery, storage, and handling of piles and other materials necessary to complete the Project which are not provided by Orange County.

MARKER LOCATIONS

Prior to the installation of new waterway markers (piles), the Vendor will locate positions using a digital global positioning system (DGPS) and verify water depths and lake bottom substrate types at all work locations. The actual position of installed markers shall be within two (2) meters (6 feet) of the GPS location designated by Orange County on the Location Assignment and/or Marker Records. Any discrepancies between the coordinates of the marker location provided on the Marker Records and/or Location Assignment shall be reported to Orange County prior to installation.

The Vendor is to determine if underground or overhead utilities exist at all work locations and propose adjustments to work locations as needed to avoid any damage to existing utilities. Vendor must contact Sunshine Utilities (1-800-432-4770) prior to the commencement of construction.

SIGNED AND SEALED SURVEY BY LICENSED SURVEYOR

It is critical that each marker is placed in the exact location specified. A signed and sealed survey is required, to include locations of the exact piling installations and also to determine the installed sign height above the Normal High Water Elevation of NAVD '88 in order to comply with the Assignment. The survey will include each sign's horizontal and vertical locations (X,Y,Z), with submittal of the digital survey record.

SUPPORT FOR ORANGE COUNTY'S REPRESENTATIVE

The Vendor will allow Orange County representative(s) or designee(s) on its work vessel or other work platform at each project area/work site to observe work or conduct inspections, as needed.

MARKER RECORDS AND REPORTS

The Vendor shall maintain and submit to the County, the Marker Records for each marker installation or removal performed within 30 business days of completion or as otherwise specified in the Location Assignment. For each site, these records shall include the date and type of work performed and, as applicable, the following: type of sign panel, the number of

piles installed or removed, method of pile installation, the type, size and length of each pile, depth of penetration of each pile in substrate, the type and capacity of the hammer used, water depth at time of installation, location, type of substrate, any problems encountered, modifications in the work, cleaning compounds used, inspections performed and any other details relative to the work performed.

The Vendor must provide the County with the coordinates in decimal degrees (example: 28.495, -81.520) and also decimal minutes (example: 28.29.702, -81.31.213) for all new piling installation marker locations. Precision of piling placement and reporting of the final placement is crucial for the successful completion of this contract. These positions must be accurate to two (2) meters (6 feet) resolution using DGPS, WAAS enabled with WGS-84 map datum. If issues arise due to persistent obstructions in the area, and an accurate GPS signal cannot be maintained, the contractor must contact the Orange County Project Manager for guidance. The Vendor shall provide digital photographs of each marker removal and marker installation. The photographs must be clear, legible, and identified with the waterbody Location Assignment marker reference number and the date the photo was taken. The Vendor shall certify that the methods used to conduct work described in a Location Assignment are in accordance with the Signage Technical Specifications (Appendix 1). Maps showing the approximate pilings locations are included in Appendix 3.

ENVIRONMENTAL PROTECTION & PROTECTION OF WATER RESOURCES

This section covers the prevention of environmental damage as a result of operations under this contract. For the purpose of this specification, environmental damage is defined as the presence of hazardous, physical, chemical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances; affect other species, biological communities, or ecosystems; or degrade the quality of the environment for intrinsic, aesthetic, cultural, and/or historic purposes. The control of environmental damage requires consideration of land, water, and air, and includes management of visual aesthetics, noise, solid waste, radiant energy and radioactive materials, as well as other pollutants.

The Vendor shall keep construction activities under surveillance, management, and control to avoid pollution of surface water, ground water and wetlands. The Vendor shall plan his operation and perform all work necessary to minimize adverse impact or violation of the water quality standards. Special management techniques, as set forth below, shall be implemented to control water pollution by the listed construction activities covered under the Location Assignment between Orange County and the Vendor. The Vendor's construction methods shall protect wetland and surface water areas from damage due to mechanical grading, erosion, sedimentation and turbid discharges. There shall be no storage or stockpiling of equipment, tools, or materials within wetlands or along the shoreline within the littoral zone, unless specifically authorized.

TURBIDITY

The Vendor shall conduct operations in a manner to minimize turbidity and shall conform to all water quality standards as prescribed by Chapter 62-302, Florida Administrative Code and the

Florida Department of Environmental Protection (DEP). The use of a turbidity curtain and other suitable Best Management Practices (BMPs) around each work site will be required, while driving the piling into the lake bottom.

PROTECTION OF FISH AND WILDLIFE & MONITORING WATER AREAS

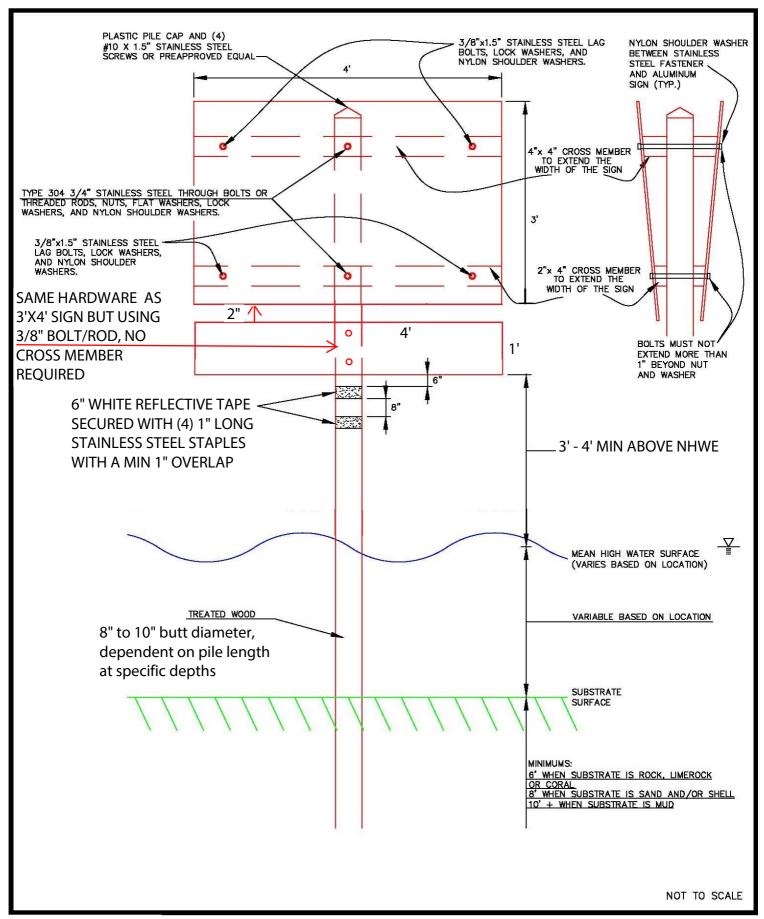
Vendor shall keep construction activities under surveillance, management, and control to minimize interference with, disturbance to, and damage of fish and wildlife. In the event that a threatened or endangered species is harmed as a result of construction activities, the Vendor shall cease all work and immediately notify the Project Manager by phone and email communication. The monitoring of water areas and natural habitat affected by construction activities shall be the responsibility of the Vendor.

QUALITY CONTROL

The Vendor shall establish and maintain quality control for environmental protection as set forth herein. If any activities associated with a Location Assignment cannot be performed without affecting environmental quality, work shall cease and the Project Manager will be notified immediately by phone and email communication (no later than the morning of the following working day). Any actual or potential incident related to a failure to comply with laws, regulations and ordinances shall be reported to the Project Manager and the corrective action taken shall be noted in the Marker Records.

WARRANTY

Upon final completion of the contract, the Vendor will warranty all work for a one year period. All pilings driven will be warrantied to be straight and level, free of listing in any direction greater than 3 degrees. Additionally guarantying the structural integrity of the pilings not related to Acts of God or damage caused by vandalism or accidents. All signs installed are guaranteed to be securely attached and square with the piling.

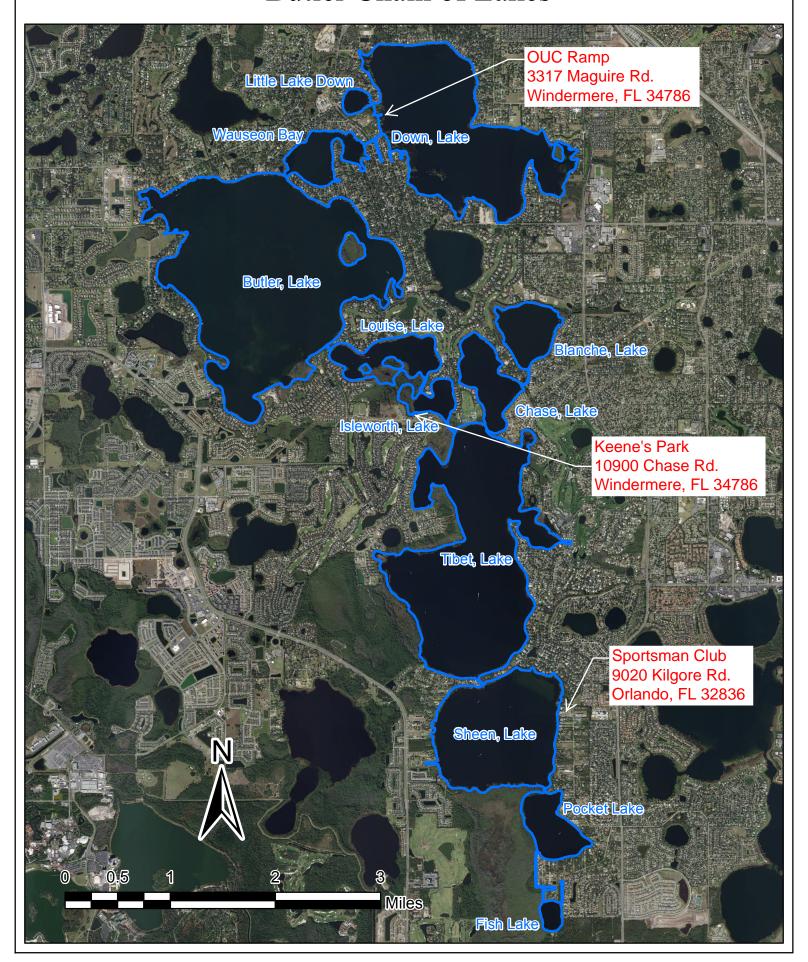




Orange County Uniform Waterway Marker Installation and Repair

Staging and Launching Locations

Butler Chain of Lakes



ID.	Marker Photo	Required Corrective Action
1A	NO WAKE Chi Sorme Co. Code	Lake Down 28 29.702 -81 31.213 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C.
1B	RESUME NORMAL SAFE OPERATION CASO SECTION 12 SECTION 1	Lake Down 28 29.702 -81 31.213 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
3A 3C	IDLE SPEED NO WAKE IN-EXCHANGE INTEGRACE 25-915-0 Integraces	Lake Down 28 29.642 -81 31.228 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C. Pile Cap

3В	Opposite Side at Same Location	Lake Down 28 29.642 -81 31.228 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C.
NA	New Pile Location	Lake Down 28 29.665 -81 31.141 New Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile With Pile Cap 68D-23.108(6), F.A.C.
NB	New Pile Location	Lake Down 28 29.665 -81 31.141 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C.
7A	NO WAKE	Lake Down 28 30.090 -81 30.765 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C.

7B	RESUME NORMAL SAFE OPERATION WHITE RESUME NORMAL	Lake Down 28 30.090 -81 30.765 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
		Pile Cap Lake Down
8A	IDLE SPEED NO WAKE Semilar DECTS Control of Control	28 30.161 -81 30.794 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on Pile 68D-23.108(6), F.A.C.
8B	RESUME NORMAL SAFE OPERATION	Lake Down 28 30.161 -81 30.794 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap



		Lake Down
	IDLE SPEED	28 29.993 -81 30.702
		Replace Piling for Correct Sign Height
		68D-23.108(2), F.A.C.
9A	NO WAKE	
011		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
	The state of the s	2 White Bands of Pile Tape on Pile
		68D-23.108(6), F.A.C.
		00D-23.100(0), 1.A.C.
	RESUME NORMAL	Lake Down
	INESOME NORMAL	28 29.993 -81 30.702
		3' x 4' RNSO Sign Panel Installation
9B		68D-23.108(5), F.A.C.
		ν, μ
	SAFE OPERATION	Pile Cap
	Print Id. (Long) On Dropin Co.	
		Lake Down
		28 30.479 -81 32.176
	IDLE SPEED	Replace Piling for Correct Sign Height
10A 10C	NO WAKE	68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
		1' x 4' TO LITTLE LAKE DOWN Installation
	LITTLE LAKE DOWN	68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on Pile
		68D-23.108(6), F.A.C.

10B	RESUME NORMAL SAFE OPERATION	Lake Down 28 30.479 -81 32.176 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
11A 11C	IDLE SPEED NO WAKE LAKE DOWN	Little Lake Down 28 30.480 -81 32.293 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE DOWN Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on Pile 68D-23.108(6), F.A.C.
11B	RESUME NORMAL SAFE OPERATION Particle Express A Company of the C	Little Lake Down 28 30.480 -81 32.293 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

		Lake Down
		28 30.276 -81 32.167
	IDLE SPEED	Replace Piling for Correct Sign Height
		68D-23.108(2), F.A.C.
		08D-23.108(2), 1.A.C.
12A	NO WAKE	3' x 4' ISNW Sign Panel Installation
12C	NO WAKE	1' x 4' TO LAKE WAUSEON BAY Installation
		68D-23.108(5), F.A.C.
	LAKE WAUSEON BAY	
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Lake Down
	RESUME NORMAL	28 30.276 -81 32.167
		3' x 4' RNSO Sign Panel Installation
12B	SAFE OPERATION	68D-23.108(5), F.A.C.
		Pile Cap
		Wauseon Bay
		28 30.183 -81 32.328
		Remove Buoy
	Market Street St	Install Piling for Correct Sign Height
13A	Section (Street, Section)	68D-23.108(2), F.A.C.
13A 13C		3' x 4' ISNW Sign Panel Installation
		1' x 4' TO LAKE DOWN Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.

13B	Remove Buoy New Pile Location	Wauseon Bay 28 30.183 -81 32.328 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
14A	New Pile Location	Lake Down 28 30.141 -81 30.788 Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C.
14B	New Pile Location	Lake Down 28 30.141 -81 30.788 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
15A	IDLE SPEED NO WAKE	Lake Down 28 30.065 -81 30.753 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C.

15B	RESUME NORMAL SAFE OPERATION CALCADITY COMPANY COMPA	Lake Down 28 30.065 -81 30.753 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
17A	WARE WARE	Lake Down 28 29.969 -81 30.705 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
17B	Remove Buoy New Pile Location	Lake Down 28 29.969 -81 30.705 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
18A	Remove Piling	Wauseon Bay 28 30.236 -81 32.547 Remove Piling and Associated Signage

18B 18C	IDLE SPEED NO WAKE Agreement for Energy Frontings Do 57 for Emergencies	Wauseon Bay 28 30.236 -81 32.547 Remove Piling and Associated Signage
19A	New Pile Installation	Wauseon Bay 28 30.201 -81 32.492 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
19B	RESUME NORMAL SAFE OPERATION	Wauseon Bay 28 30.201 -81 32.492 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

20A 20C	IDLE SPEED NO WAKE TO LAKE BUTLER	Wauseon Bay 28 30.013 -81 32.940 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE BUTLER Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape
20B	RESUME NORMAL SAFE OPERATION	Wauseon Bay 28 30.013 -81 32.940 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
21A 21C	IDLE SPEED NO WAKE WAUSEON EAN	Lake Butler 28 29.953 -81 32.979 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO WAUSEON BAY Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape

21B	RESUME NORMAL SAFE OPERATION Manuales	Lake Butler 28 29.953 -81 32.979 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
23A 23C	IDLE SPEED NO WAKE LAKE LOUISE	Lake Butler 28 28.735 -81 32.633 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE LOUISE Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape
23B	RESUME NORMAL SAFE OPERATION Particula (2013) Delarge (2015)	Lake Butler 28 28.735 -81 32.633 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

24A 24C	NOWAKE	Lake Louise 28 28.694 -81 32.589 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE BUTLER Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
24B	Remove Buoy New Pile Installation	Lake Louise 28 28.694 -81 32.589 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
25A 25C	New Pile Installation	Lake Louise 28 28.503 -81 31.822 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE ISLEWORTH Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.

25B	New Pile Installation	Lake Louise 28 28.503 -81 31.822 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
26A 26C	New Pile Installation	Lake Isleworth 28 28.377 -81 31.847 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE LOUISE Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
26B	New Pile Installation	Lake Isleworth 28 28.377 -81 31.847 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
27A	TO TO A MANUAL PARTY OF THE PAR	Lake Isleworth 28 28.257 -81 32.873 Remove Buoy and Install Two Pilings at Boat Ramp, as noted on ID I & J

IA	New Pile Location	Lake Isleworth 28 28.270 -81 31.889 Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
IB	New Pile Location	Lake Isleworth 28 28.270 -81 31.889 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
JA JC	New Pile Location	Lake Isleworth 28 28.265 -81 31.849 Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' RNSO Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.

JB	New Pile Location	Lake Isleworth 28 28.265 -81 31.849 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
28A 28C 28D	IDLE SPEED NO WAKE TO LAKE-TIBET CHELPICE BORDING Yolkiloss Tor Emergencies	Lake Isleworth 28 28.202 -81 31.663 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE TIBET Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C.
28B	New Pile Installation	Lake Isleworth 28 28.202 -81 31.663 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
29A 29C	New Pile Installation	Lake Tibet 28 28.096 -81 31.566 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE ISLEWORTH Installation 68D-23.108(5), F.A.C.

29B	New Pile Installation	Lake Tibet 28 28.096 -81 31.566
		3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C
		Pile Cap
		Lake Tibet
		28 28.118 -81 31.324
		Install Piling for Correct Sign Height
	New Pile Location	68D-23.108(2), F.A.C.
30A		3' x 4' ISNW Sign Panel Installation
30C		1' x 4' TO LAKE CHASE Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
		Lake Tibet
		28 28.118 -81 31.324
30B	New Pile Location	3' x 4' RNSO Sign Panel Installation
		68D-23.108(5), F.A.C.
		Pile Cap

		Lake Tibet
		28 26.342 -81 31.399
		28 20.342 -81 31.399
		Replace Piling for Correct Sign Height
	IDLE SPEED	68D-23.108(2), F.A.C.
31A		2' v 4' ICNIM/ Sign Danal Installation
31C	NO WAKE	3' x 4' ISNW Sign Panel Installation
31D	MACHINE	1' x 4' TO LAKE SHEEN Installation
	LAKE SHEEN	1' x 4' Boating Safety Sign Installation
	RANDISCHIED OF RADIO MARKETS Dial 911 for Emergencies	68D-23.108(5), F.A.C.
		Pile Tape
	The same of the sa	Lake Tibet
	RESUME NORMAL	28 26.342 -81 31.399
		20 20.3 12 01 31.333
0.170		3' x 4' RNSO Sign Panel Installation
31B	SAFE OPERATION	68D-23.108(5), F.A.C.
	Permitto (Solit)	
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Lake Chase
		28 28.155 -81 31.306
		28 28.133 -81 31.300
		Remove Buoy
		Install Piling for Correct Sign Height
99.4	D	68D-23.108(2), F.A.C.
32A 32C	Remove Buoy New Pile Location	3' x 4' ISNW Sign Panel Installation
	New File Location	1' x 4' TO LAKE TIBET Installation
		68D-23.108(5), F.A.C.
		00D 23.100(3), 1.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		000 23.100(0), 1.A.C.

	Remove Buoy	Lake Chase 28 28.155 -81 31.306 3' x 4' RNSO Sign Panel Installation
32B	New Pile Location	_
	New The Bootton	68D-23.108(5), F.A.C.
		Pile Cap
	IDLE SPEED	Lake Chase
		28 28.435 -81 31.024
33A 33C	NO WAKE	Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C.
33D	LAKE BLANCHE	3' x 4' ISNW Sign Panel Installation
00D	Co. LINES MINISTER LINES Desire Videling	1' x 4' TO LAKE BLANCHE Installation
	Dial 911 for Emergencies	1' x 4' Boating Safety Sign Installation
		68D-23.108(5), F.A.C.
		Lake Chase
		28 28.435 -81 31.024
		20 20.433 -01 31.024
	RESUME NORMAL 1	3' x 4' RNSO Sign Panel Installation
33B	CAPE	68D-23.108(5), F.A.C.
	SAFE OPERATION	2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Pile Cap
		Lake Blanche
		28 28.572 -81 30.977
	IDLE SPEED	Replace Piling for Correct Sign Height
		68D-23.108(2), F.A.C.
34A		3' x 4' ISNW Sign Panel Installation
	NO WAKE	68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape
		68D-23.108(6), F.A.C.

34B	RESUME NORMAL SAFE OPERATION Process (2017) Process (2017) Process (2017)	Lake Blanche 28 28.572 -81 30.977 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
35A 35C	NO WAKE NO LAKE TIBET	Lake Sheen 28 26.269 -81 31.326 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE TIBET Installation 68D-23.108(5), F.A.C. Pile Cap
35B	RESUME NORMAL SAAFE OPERATION	Lake Sheen 28 26.269 -81 31.326 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C.

	DAW CORN	Lake Sheen
		28 25.529 -81 30.844
	IDLE SPEED	20 25.525 01 50.544
		Replace Piling for Correct Sign Height
36A		
36C	NO WAKE	68D-23.108(2), F.A.C.
36D	LAKE POCKET	2' v 4' ISNIM Sign Danel Installation
	DARKE POURE	3' x 4' ISNW Sign Panel Installation
	Dial 911 for Emergencies	1' x 4' TO LAKE POCKET Installation
		1' x 4' Boating Safety Sign Installation
		68D-23.108(5), F.A.C.
		Lake Sheen
		28 25.529 -81 30.844
	RESUME NORMAL	
		3' x 4' RNSO Sign Panel Installation
36B	American State (Section)	68D-23.108(5), F.A.C.
	SAFE OPERATION	
	Of Starget Star	2 White Bands of Pile Tape
		68D-23.108(6), F.A.C.
		Dila Can
	MI TO THE PARTY OF	Pile Cap Lake Pocket
		28 25.479 -81 30.824
		D D
		Remove Buoy
37A 37C	Remove Buoy	Install Piling for Correct Sign Height
	New Pile Installation	68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
		1' x 4' TO LAKE POCKET Installation
		68D-23.108(5), F.A.C.

37B	New Pile Installation	Lake Pocket 28 25.479 -81 30.824 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape
		68D-23.108(6), F.A.C. Pile Cap
38A 38C	IDLE SPEED NO WAKE PARTIE DE LE TORINGE TO FISH LAKE	Lake Pocket 28 25.077 -81 30.891 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO FISH LAKE Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C.
38B	RESUME NORMAL SAFE OPERATION	Lake Pocket 28 25.077 -81 30.891 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

39A	New Pile Installation	Fish Lake 28 24.692 -81 30.850 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C.
		Pile Cap
39B	RESUME NORMAL SAFE OPERATION	Fish Lake 28 24.692 -81 30.850 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
KA	New Pile Location	Lake Tibet 28 27.543 -81 30.931 Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.

КВ	New Pile Location	Lake Tibet 28 27.543 -81 30.931 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
49A	New Pile Installation	Wauseon Bay 28 30.264 -81 32.523 Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
49B	New Pile Installation	Wauseon Bay 28 30.264 -81 32.523 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
51	Buoy Removal	Wauseon Bay 28 30.246 -81 32.598 Buoy Removal

		W D-
53A	New Pile Installation	Wauseon Bay
		28 30.244 -81 32.471
		Install Piling for Correct Sign Height
		68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
	State of the state	202 20.200(0), 1 11 11 21
53B	RESUME NORMAL SAFE OPERATION	Wauseon Bay
		28 30.244 -81 32.471
		3' x 4' RNSO Sign Panel Installation
		68D-23.108(5), F.A.C.
	TAILUN	
		Pile Cap
	No.	
LA	New Pile Location	Wauseon Bay
		28 30.271 -81 32.604
		Install Diling for Correct Sign Height
		Install Piling for Correct Sign Height
		68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
LB	New Pile Location	Wauseon Bay
		28 30.271 -81 32.604
		3' x 4' RNSO Sign Panel Installation
		68D-23.108(5), F.A.C.
		, ,,,
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		- 1 - 1

Orange County Uniform Waterway Marker Installation and Repair Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

Butler Chain of Lakes Assignment Location

		Pile Cap
MA	New Pile Location	Wauseon Bay 28 30.225 -81 32.592 Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
MB	New Pile Location	Wauseon Bay 28 30.225 -81 32.592 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

Big Sand Lake



Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

ID.	Marker Photo	Required Corrective Action
	Remove Buoy New Piling Installation	Big Sand Lake 28 26.405 -81 28.885
89A 89C		Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
	Remove Buoy New Piling Installation	Big Sand Lake 28 26.405 -81 28.885
89B		3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C.
		Pile Cap
	Remove Buoy New Piling Installation	Big Sand Lake 28 26.289 -81 28.694
		Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C.
90A 90C		3' x 4' ISNW Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

90B	Remove Buoy New Piling Installation	Big Sand Lake 28 26.289 -81 28.694 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
GA	New Piling Installation	Big Sand Lake 28 26.320 -81 28.751 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
GB	New Piling Installation	Big Sand Lake 28 26.320 -81 28.751 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

ORANGE COUNTY GOVERNMENT FLORIDA

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

91A	NO	Big Sand Lake 28 25.795 -81 29.022 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C
91B	Remove Buoy New Piling Installation	Big Sand Lake 28 25.795 -81 29.022 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
92A	NO	Big Sand Lake 28 25.559 -81 28.946 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.

ORANGE COUNTY GOVERNMENT FLORIDA

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

92B	Remove Buoy New Piling Installation	Big Sand Lake 28 25.559 -81 28.946 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
93A	CHANNEL	Big Sand Lake 28 24.977 -81 28.927 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
93B	Remove Buoy New Piling Installation	Big Sand Lake 28 24.977 -81 28.927 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

ORANGE COUNTY GOVERNMENT FLORIDA

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

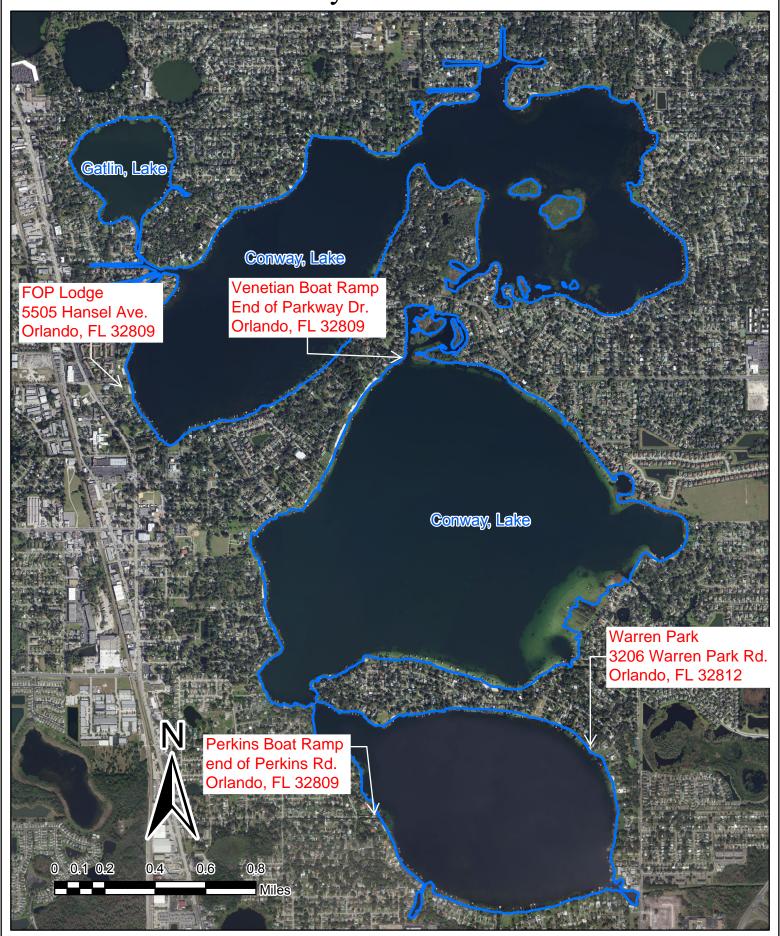
		Big Sand Lake 28 24.922 -81 28.965
	NO	Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C.
94A 94C	WAK	3' x 4' ISNW Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
		Big Sand Lake 28 24.922 -81 28.965
94B	Remove Buoy New Piling Installation	3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C.
		Pile Cap
		Big Sand Lake
		28 25.644 -81 29.669
		Remove Buoy Install Piling for Correct Sign Height
	NO	68D-23.108(2), F.A.C.
95A	**************************************	3' x 4' ISNW Sign Panel Installation
	WAKE	68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.

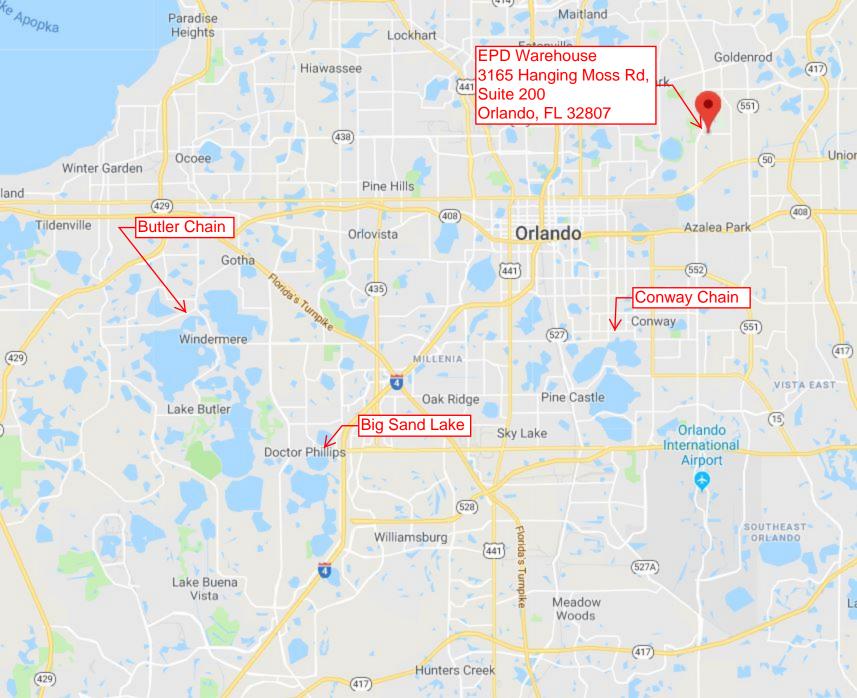
ORANGE COUNTY GOVERNMENT FLORIDA

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

95B	Remove Buoy New Piling Installation	Big Sand Lake 28 25.644 -81 29.669 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
96A 96C	NO WAKE	Big Sand Lake 28 25.615 -81 29.729 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
96B	Remove Buoy New Piling Installation	Big Sand Lake 28 25.615 -81 29.729 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

Conway Chain of Lakes





Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

ID.	Marker Photo	Required Corrective Action
		Little Lake Conway
		28 29.140 -81 21.905
		Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C.
54A 54C	TIBLE SPEED AD WASE MARKETERS MARKETERS	3' x 4' ISNW Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
54B	RESUME NORMAL SAFE OPERATION	Little Lake Conway 28 29.140 -81 21.905
		3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
		Little Lake Conway
55A 55C	Remove Buoy New Pile Installation	Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LAKE GATLIN Installation 68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.

Orange County Uniform Waterway Marker Installation and Repair Orange County GOVERNMENT

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		Little Lake Conway
		28 29.149 -81 21.898
	Pamaya Dua-	
55B	Remove Buoy New Pile Installation	3' x 4' RNSO Sign Panel Installation
	New 1 lie liistaliation	68D-23.108(5), F.A.C.
		Pile Cap
		Lake Gatlin
		28 29.304 -81 22.070
		Install Piling for Correct Sign Height
		68D-23.108(2), F.A.C.
56A	New Pile Installation	
		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Lake Gatlin
		28 29.304 -81 22.070
56B	New Pile Installation	3' x 4' RNSO Sign Panel Installation
оор	new file installation	68D-23.108(5), F.A.C.
		000 23.100(3), 1.m.c.
		Pile Cap
		Little Lake Conway
		28 28.663 -81 21.962
		Remove Buoy
58A	USPEED	Install Piling for Correct Sign Height
JOA	WAKE	68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		Pile Cap

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

58B	Remove Buoy New Pile Installation	Little Lake Conway 28 28.663 -81 21.962 3' x 4' RNSO Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
59A	DLE SPEED WANTE AND WANTE AND THE STATE OF	Little Lake Conway 28 29.693 -81 20.885 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
59B	New Pile Installation	Little Lake Conway 28 29.693 -81 20.885 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
60A	DLE SPE	Little Lake Conway 28 28.660 -81 21.942 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C.

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		Pile Cap
60B	Remove Buoy New Pile Installation	Little Lake Conway 28 28.660 -81 21.942 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile
61A		68D-23.108(6), F.A.C. Little Lake Conway 28 29.764 -81 20.878 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' I Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
61B	RESUME NORMAL SAFE OPERATION	Little Lake Conway 28 29.764 -81 20.878 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C.

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

Conway Chain of Lakes Assignment Location

		Little Lake Conway
	146	28 29.786 -81 20.810
a0.4	IDLE SPEED	Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C.
62A		3' x 4' ISNW Sign Panel Installation
	NO WAKE DATOMATICAN	68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape
		68D-23.108(6), F.A.C.
	RESUME NORMAL	Little Lake Conway 28 29.786 -81 20.810
62B		3' x 4' RNSO Sign Panel Installation
	SAFE OPERATION	68D-23.108(5), F.A.C.
		Pile Cap
		Little Lake Conway
		28 29.776 -81 20.777
		Replace Piling for Correct Sign Height
63A		68D-23.108(2), F.A.C.
0011		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape
		68D-23.108(6), F.A.C.

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Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

63B	RESUME NORMAL SAFE OPERATION	Little Lake Conway 28 29.776 -81 20.777 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
64A	D.E. SPEED NO WARE	Little Lake Conway 28 29.339 -81 20.684 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
64B	RESUME NORMAL SAFE OPERATION	Little Lake Conway 28 29.339 -81 20.684 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C.

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		Little Lake Conway
	The second secon	28 29.407 -81 20.652
	IDLE SPEED	Donland Piling for Correct Circ Height
		Replace Piling for Correct Sign Height
65A	NO WAKE	68D-23.108(2), F.A.C.
69A		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape
		68D-23.108(6), F.A.C.
		Little Lake Conway
	RESUME NORMAL	28 29.407 -81 20.652
	LAMAL	
65B		3' x 4' RNSO Sign Panel Installation
оор		68D-23.108(5), F.A.C.
	SAFE OPERATION	
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Little Lake Conway
		28 29.107 -81 20.812
		Replace Piling for Correct Sign Height
	TO BE SPEED	68D-23.108(2), F.A.C.
66A	NO WAKE	2/ 4/ ICNINA Ciara Daniel Installation
		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape
		68D-23.108(6), F.A.C.
<u></u>		202 201200(0),

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

66B	RESUME NORMAL SAFE OPERATION	Little Lake Conway 28 29.107 -81 20.812 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
67A	New Pile Installation	Little Lake Conway 28 29.198 -81 20.874 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C.
67B	RESUME NORMAL SAFE OPERATION	Little Lake Conway 28 29.198 -81 20.874 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		Little Lake Conway
		28 29.186 -81 20.842
	IDLE SPEED	Replace Piling for Correct Sign Height
00.4		68D-23.108(2), F.A.C.
68A 68C		
000	wertungeNO WAKE	3' x 4' ISNW Sign Panel Installation
	LAKE CONWAY	1' x 4' TO LAKE CONWAY Installation
		68D-23.108(5), F.A.C.
		Dila Com
		Pile Cap
		Little Lake Conway
		28 29.186 -81 20.842
	Commence of the second second second	
68B		3' x 4' RNSO Sign Panel Installation
ООД		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Little Lake Conway Canal
		28 29.106 -81 20.968
	IDLE SPEED	
69A		Replace Piling for Correct Sign Height
69C	NO WAKE	68D-23.108(2), F.A.C.
	COnjuy	3' x 4' ISNW Sign Panel Installation
	a definition	1' x 4' Boating Safety Sign Installation
		68D-23.108(5), F.A.C.
		00D 23.100(3), 1.A.C.

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		Little Lake Conway Canal
		28 29.106 -81 20.968
		3' x 4' ISNW Sign Panel Installation
69B	New Pile Installation	68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Pile Cap
		Little Lake Conway Canal
		28 29.021 -81 20.988
70A	New Pile Installation	Replace Piling for Correct Sign Height
10A		68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		Little Lake Conway Canal
		28 29.021 -81 20.988
		3' x 4' ISNW Sign Panel Installation
	New Pile Installation	68D-23.108(5), F.A.C.
70B		
		2 White Bands of Pile Tape
		68D-23.108(6), F.A.C.
		Pile Cap

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		Little Lake Conway Canal
		28 28.958 -81 21.039
	angular and the second	Replace Piling for Correct Sign Height
714	IDLE SPEED	68D-23.108(2), F.A.C.
71A	NO WAKE	3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape
		68D-23.108(6), F.A.C.
		Little Lake Conway Canal
	DLE SPEED	28 28.958 -81 21.039
71B		3' x 4' ISNW Sign Panel Installation
	WAKE DEPOSITION	68D-23.108(5), F.A.C.
		Pile Cap
		Little Lake Conway Canal
		28 28.932 -81 21.048
	IDLE SPEED	Replace Piling for Correct Sign Height
72A		68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
	Permit No. 03-018 NO WAKE ISSUES OF COMMENTS OF THE PERMIT	68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape
		68D-23.108(6), F.A.C.

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

72B	New Pile Installation	Little Lake Conway Canal 28 28.932 -81 21.048 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
73A	DLE SPEED NO MAKE	Lake Conway 28 28.887 -81 21.143 Remove Piling and Associated Signage
74A 74C 74D	IDLE SPEED NO WAKE	Lake Conway 28 28.882 -81 21.119 Replace Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' TO LITTLE LAKE CONWAY Installation 1' x 4' Boating Safety Sign Installation
74B	New Pile Installation	Lake Conway 28 28.882 -81 21.119 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape 68D-23.108(6), F.A.C. Pile Cap

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		Lake Conway
		28 28.870 -81 21.142
		Remove Buoy
76A	Remove Buoy New Pile Installation	Install Piling for Correct Sign Height
	New File Installation	68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		Lake Conway
		28 28.870 -81 21.142
		3' x 4' RNSO Sign Panel Installation
7cD	Remove Buoy	68D-23.108(5), F.A.C.
76B	New Pile Installation	
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Pile Cap
		Lake Conway
		28 27.841 -81 21.437
	IDLE \$PEED	
	mining income in the second se	Replace Piling for Correct Sign Height
77A		68D-23.108(2), F.A.C.
77C 77D	N. LAKE CONWAY	3' x 4' ISNW Sign Panel Installation
	N. LAKE CONWAY	1' x 4' TO LAKE CONWAY Installation
	Bulletonessellisters or transported to Dail 9f1 for Emergencies	1' x 4' Boating Safety Sign Installation
		68D-23.108(5), F.A.C.
		Dilo Con
<u> </u>		Pile Cap

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		Lake Conway 28 27.841 -81 21.437
		28 27.841 -81 21.437
77B	New Pile Installation	3' x 4' RNSO Sign Panel Installation
–		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Lake Conway
		28 27.848 -81 21.467
		Replace Piling for Correct Sign Height
		68D-23.108(2), F.A.C.
78A	DLE SPEED THINKING TO THINKING THE	3' x 4' ISNW Sign Panel Installation
78C	LO VAKE	1' x 4' TO S. LAKE CONWAY Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		Lake Conway
	RESUME NORMAL	28 27.848 -81 21.467
78B	THE TURNAL	3' x 4' RNSO Sign Panel Installation
.02	SAFE OPERATION	68D-23.108(5), F.A.C.
		` "
		Pile Cap
		South Lake Conway
		28 27.505 -81 21.186
79A	Remove Buoy	Remove Buoy
		Install Piling for Correct Sign Height
	New Piling Installation	68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
79B	Remove Buoy New Piling Installation	South Lake Conway 28 27.497 -81 21.186 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
80A	Luc spe	South Lake Conway 28 27.497 -81 21.186 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
80B	Remove Buoy New Piling Installation	South Lake Conway 28 27.497 -81 21.186 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

81A 81C	New Piling Installation	South Lake Conway 28 27.695 -81 20.535 Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C. Pile Cap
81B	New Piling Installation	South Lake Conway 28 27.695 -81 20.535 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
82A	New Piling Installation	South Lake Conway 28 27.684 -81 20.525 Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
82B	New Piling Installation	South Lake Conway 28 27.684 -81 20.525 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.

Orange County Uniform Waterway Marker Installation and Repair Orange County GOVERNMENT

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

		South Lake
		28 27.302 -81 20.439
		Replace Piling for Correct Sign Height
	DLE SPEED	68D-23.108(2), F.A.C.
85A	HARITAGE OF WARE	3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		2 White Bands of Pile Tape on New Pile
		68D-23.108(6), F.A.C.
		South Lake
	e e	28 27.302 -81 20.439
	RESUME NORMAL	3' x 4' RNSO Sign Panel Installation
85B		68D-23.108(5), F.A.C.
COD	SAFE OPERATION	
		Pile Cap
		Little Lake Conway
		28 29.613 -81 21.081
86A		Replace Piling for Correct Sign Height
		68D-23.108(2), F.A.C.
		3' x 4' ISNW Sign Panel Installation
		68D-23.108(5), F.A.C.
		Pile Cap

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

86B	RESUME NORMAL SAFE OPERATION	Little Lake Conway 28 29.613 -81 21.081 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.
87A	ME SPEE	Little Lake Conway 28 29.353 -81 21.580 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C. Pile Cap
87B	Remove Buoy New Piling Installation	Little Lake Conway 28 29.353 -81 21.580 3' x 4' RNSO Sign Panel Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C.

Pursuant to Chapter 68D-23, Florida Administrative Code (FAC)

88A	LE SPEED ON WAILS	Little Lake Conway 28 29.356 -81 21.571 Remove Buoy Install Piling for Correct Sign Height 68D-23.108(2), F.A.C. 3' x 4' ISNW Sign Panel Installation 68D-23.108(5), F.A.C.
88B	Remove Buoy New Piling Installation	Little Lake Conway 28 29.356 -81 21.571 3' x 4' RNSO Sign Panel Installation 1' x 4' Boating Safety Sign Installation 68D-23.108(5), F.A.C. 2 White Bands of Pile Tape on New Pile 68D-23.108(6), F.A.C. Pile Cap