November 29, 2016

Members of the City Commission City of Belle Isle, Florida 1600 Nela Avenue Belle Isle, Florida 32809



## MICHAEL R. STATHAM, RLA Program Development Supervisor

Orange County Parks and Recreation Division Barnett Park Administration 4801 W. Colonial Drive Orlando, Florida 32808

> 407-836-6261 • Fax: 407-296-5159 Email: Michael.Statham@ocfl.net FL REG# LA0001643



## RE: Planning and Zoning Decision Appeal for Proposed Warren Park Canoe Launch

Dear Members of the City Commission:

We thank you very much for the opportunity to present our appeal of the Planning and Zoning Board decision to deny our Zoning Application for the proposed Canoe and Kayak Launch located within Warren Park. We also appreciate the opportunity to represent our site plan for your consideration and approval for our proposed Warren Park Canoe Launch project located on Lake Conway within Warren Park, located at 3206 Warren Park Drive.

In our submittal package to you, we have included the following items for your review and consideration for approval of our Boat Dock Zoning Application:

- 1. Signed and sealed engineering drawings, 3 copies, revised and resubmitted as per City Comments;
- 2. St. Johns River Water Management District Exemption Verification Letter;
- 3. Booklets submitted to the City for Commissioner review. Each booklet contains the information contained within the Power Point presentation. In addition, we have included the responses to comments as presented at the Planning and Zoning Board meeting.

## Proposed Warren Park Canoe Launch

On November 14, 2016, Orange County Parks and Recreation presented its proposal for a low impact canoe, kayak, and paddle board launch to the City of Belle Isle Planning and Zoning Board. We desire this launch to be a low impact extension of our Warren Park experience and to reintroduce a waterborne recreation dimension to our park users on Lake Conway. We believe that the residents of Belle Isle will benefit greatly from this additional recreational amenity offered within our park.

The City of Belle Isle design standards allow for total dock area square footage of 10 times the linear dimension of Lake Conway's frontage with a maximum of 1,000 square feet. While the park's lake frontage is approximately 77 linear feet, our proposed, combined boardwalk, gangway ramp, and floating platform square footage is approximately 520 square feet, or just 70% of the maximum allowable square footage of 770 square feet. This low square footage and quality design will provide a low impact amenity on Lake Conway that will encourage the water recreation element to our park and promote connectivity to the lake.

While our revised engineering plans currently illustrate a signage element, we have existing signage along the shoreline and pedestrian entry located at the street that would reinforce the prohibition of all motorized water craft from using our launch area. We also would propose new site amenities such as trash receptacles, benches, picnic tables, and new sodded areas to make this area a more presentable and useable space for the public as an extension of Warren Park.

As in all our parks, security and safety of the public is our primary goal, as is maintaining a good quality relationship with our neighbors. As a required safety element, fencing and pedestrian gates will protect the property from unauthorized and unintended use during non-park hours.

After our presentation and much public discussion, our zoning application was denied. The Planning and Zoning Board cited general inconsistencies with the Comprehensive Plan (no specific section of the Comprehensive Plan was cited) and the City's Land Development Code, sections 42-33, and 54-83. We respectfully believe that the Planning and Zoning Board erred in its decision for the following reasons:

- 1. The proposed use meets City Code and was designed to cover minimal area and thus to provide minimal impact, and to be consistent with neighboring dock uses. City planner April Fisher, AICP, stated the following in her October 14, 2016 review:
  - a. "The proposed plan for the canoe launch complies with the City's current boat dock regulations with respect to length, setbacks and total area."
  - b. "The proposed length from water's edge to the waterward end of the canoe launch is approximately sixty (60) feet. This is consistent with and does not extend further into the lake than the existing docks within 300 feet and adjacent properties of the proposed canoe launch."
  - c. "The minimum required setbacks are exceeded on both sides of the proposed canoe launch."
  - d. "Total area is provided at approximately 520 square feet. This is 250 square-feet less than the total area allowed per Code Sec. 48-32(3)."
  - e. "Because the proposed design is consistent with the current boat dock regulations, a variance from these provisions is not needed."
- 2. The proposed non-motorized watercraft launch onto State owned waters, Lake Conway, is a riparian right granted to Orange County as a property owner by the State of Florida and entirely consistent with the PUB zoning that applies to the park property. The park and the proposed non-motorized watercraft launch are a "recreational/open space" area and facility under Section 54-83(b)(3) of the Belle Isle Land Development Code (LDC). No criteria are provided for the Planning and Zoning Board's review of a site plan prior to building permit under Section 54-83(f)(3), but as stated above in the excerpts from April Fisher's site plan review, the proposed launch meets City Code.

(0)	

- 3. Our proposal is consistent with boat docks that currently exist immediately located to the north and south of the Warren Park lakefront lot. There are approximately 14 boat docks and launches within 500' to the north and south or our site and our proposal is consistent with this land use of our neighbors. In fact, most lakefront property owners along Lake Conway have some form of dock, boat house, and launching facility. As stated by April Fisher, the proposed length of 60 feet for the canoe launch is consistent with and does not extend further into the lake than existing docks within 300 feet and adjacent properties. Therefore, we feel that the proposed land use is compatible with that of the neighboring properties and of many lakefront properties along Lake Conway.
- 4. City of Belle Isle Land Development Code Section 42-33 ("Functions, powers and duties of the planning and zoning board"), which was cited by the Planning and Zoning Board at the suggestion of the City planner at the time of the motion for denial, does not specifically prohibit any boat docks from being constructed. While the section does permit the Board to "determine whether specific proposed developments conform to the principles and requirements of the comprehensive plan for the growth and improvement of the area", the Board did not cite any specific Comprehensive Plan provisions in voting for denial of the County's proposed application, and we are not aware of any.
- 5. City of Belle Isle Land Development Code Section 54-83, regarding the PUB or Public Building Zoning District, also does not specifically prohibit the construction of a boat dock or canoe launch. To the contrary, it permits the following uses in subsection (b). (3): Recreational/open space areas and facilities.
- 6. Section 54-83 does prohibit the following uses in Section 54-83 subsection (d).
  - a. Any use that is not owned by a governmental agency. This launch would be owned and operated by Orange County through its Parks and Recreation Division.
  - b. Any use that is owned by a governmental agency, but not identified in subsections (b) or (c) of this section. As previously stated, the proposed use falls under subsection (b).
  - c. Airports and heliports.
- 7. The Belle Isle Comprehensive Plan: While the Planning and Zoning Board never identified a specific section of the Comprehensive Plan that the proposed use was allegedly inconsistent with, we believe that the proposed use is consistent with the Comprehensive Plan. For example, Objective 1.2 states that the City of Belle Isle shall continue to prepare and adopt LDCs that will regulate the redevelopment of areas "consistent with the character of the surrounding area." Furthermore, Policy 1.2.1 states that the City shall "regulate use of land and lakes consistent with the Comprehensive Plan." This launch is consistent with the character of the surrounding area and consistent with the Comprehensive Plan. Warren Park is an existing use and Lake Conway can already be accessed via Warren Park by kayakers, paddleboarders and canoeists; the proposed use would simply provide a safer way for such persons to launch, so that they do not have to wade into the lake.

- 8. Comprehensive Plan Recreation and Open Space Element, Goal 1, states: "To provide areas for recreation and open space that will benefit the residents of Belle Isle." Since not all residents of Belle Isle own lakefront property, we believe that this canoe/kayak launch offers a safe and dedicated area for this use and that the proposed launch will benefit the residents of and visitors to Belle Isle. This launch is also not a duplication of the City's Level of Service.
- 9. Comprehensive Plan Recreation and Open Space Element, Goal 2: "The City of Belle Isle shall provide active and passive recreation opportunities while protecting and improving its environmentally-sensitive areas and natural resources. Furthermore, the City shall ensure residents and visitors continued public access to the Conway Lake Chain." Our proposed launch is for non-motorized watercraft only and further ensures that residents and visitors have continued public access to the Conway Lake Chain. Lake Conway is a State owned waterway and is accessible to all members of the public, not just those who own lakefront lots and use Lake Conway as a private residential amenity.
- 10. Comprehensive Plan Intergovernmental Coordination Element: Goal 1: Policy 1.1.5: "The City shall coordinate with the Florida Department of Environmental Protection, Orange County, the School Board, and the City of Orlando for the implementation of the goals, objectives, and policies in the Recreation and Open Space Element." Orange County Parks and Recreation has been attempting to coordinate with the City at a number of levels to be allowed to enhance the public's access to the Conway Lake Chain. At the Planning and Zoning Board hearing, County representatives readily agreed to post signs prohibiting drop-off of canoes and kayaks at the waterfront portion of the park, which was one of the concerns expressed by residents, and to ensure that staff enforces the rule.
- 11. The condition of the lakefront does not provide the public with a safe and consistent access point to launch their non-motorized water craft. The condition includes rock, muck, and other potential hazards for a direct launch from the shore. This represents a safety hazard to the Park user and a potential liability for Orange County which owns the property.
- 12. Orange County Parks and Recreation agreed to all proposed conditions of approval except two of them. All others have been agreed to and were included in the presentation and the revised engineering drawings. The two at issue are as follows:
  - a. The City planner appended a condition of approval regarding a Memorandum of Understanding between the City of Belle Isle's Police Department and the Orange County's Sheriff's Department. Warren Park is located within the City of Belle Isle and was apparently annexed by the City some time ago. As such, County's understanding is that the City of Belle Isle is responsible for law enforcement services within the park, since the park is within the City's jurisdiction. The Orange County Sheriff's Office provides law enforcement services at all Orange County parks in unincorporated areas. This park is not within the unincorporated area.

b. To agree to not have any type of commercial enterprise on the property. Historically and currently we have these types of low impact and intermittent commercial enterprises, such as tennis lessons, food trucks at events, etc. These are all approved County vendors and we wish to reserve the right to maintain our relationships and continue to offer these services to the public. It did come to our attention that a local resident was soliciting paddle board lessons via a web site that Orange County Parks and Recreation did not approve or sanction.

In conclusion, we respectfully request that the City of Belle Isle overturn the Planning and Zoning Board's denial of the site plan for a low impact canoe, kayak, and paddle board launch at Warren Park. The proposed non-motorized watercraft launch complies with the City's Code and Comprehensive Plan, and will enhance the recreational opportunities afforded to the residents of and visitors to the City of Belle Isle.

Sincerely,

Matt Suedmeyer, CPRP

Manager

Orange County Parks and Recreation Division

4801 W. Colonial Dr. Orlando, FL 32808



November 14, 2016

Orange County Parks and Recreation 4801 W. Colonial Drive Orlando, Florida 32808 407-836-6200

Re: Responses to Comments for Warren Park Canoe Launch

Site Plan Review:

3206 Warren Park Road

**Applicant Request:** 

**Canoe Launch** 

Existing Zoning/Use:

**Public Buildings District (PUB)** 

## **Application Overview**

The proposed application is for the installation of a canoe and kayak launch with a boardwalk at the existing Orange County park facility known as Warren Park. The property is located within the jurisdiction of the City of Belle Isle with a zoning designation of Public Buildings District (PUB).

Sec. 54-83 of the City Code identifies requirements for the PUB zoning district. Recreational facilities owned by a governmental agency are allowed as a permitted use. Site plan review and approval is required, however, by the Planning and Zoning Board before a building permit may be issued (Sec. 54-83(f)(3)).

## **Staff Review**

The proposed plan for the canoe launch complies with the City's current boat dock regulations with respect to length, setbacks and total area. The proposed length from water's edge to the water ward end of the canoe launch is approximately sixty (60) feet. This is consistent with and does not extend further into the lake than the existing docks within 300 feet and adjacent properties of the proposed canoe launch.

The minimum required setbacks are exceeded on both sides of the proposed canoe launch. Total area is provided at approximately 520 square feet. This is 250 square-feet less than the total area allowed per Code Sec. 48-32(3). Please note that staff restricted the calculation of allowable total area to only the approximate 75 linear frontage of the park parcel and did not include the portion of linear frontage that is right-of-way.

## **Staff Recommendations**

Because the proposed design is consistent with the current boat dock regulations, a variance from these provisions is not needed. For the Board's consideration, it is within the Boards purview to require conditions applicable to approval of a proposed site plan. Staff recommends that the following considerations as conditions to be placed upon an approval of the proposed site plan:

1. A restriction that no mooring be allowed on any portion of the proposed canoe launch and boardwalk areas;

OCPR Response: We agree to that restriction for motorized water craft. Permanent mooring of any water craft will also be restricted.

2. A restriction that no swimming is allowed;

OCPR Response: We agree with the restriction of no swimming. Three "no swimming" signs are currently in place; erected as a safety precaution but only faces the park and is not facing the lake.

3. A prohibition on any private business or commercial enterprise running a business from the property such as, but not limited to, paddle board lessons or kayak/canoe tours;

OCPR Response: We do not agree with this condition. Orange County reserves the right to have its County approved vendors in its park.

4. An executed Memorandum of Understanding agreement between the local governments of Belle Isle and Orange County and all law enforcement parties (inclusive of the City of Belle Isle Police Department, Orange County Sheriff's Office, and the Florida Wildlife Commission) as to patrol and enforcement responsibilities and authorities within the park and surrounding the canoe launch, as well as in the lake waters.

OCPR Response: This agreement must be generated by, and mutually agreed to, by the City of Belle Isle Chief of Police, Laura Houston and the Orange County Sheriff, Jerry Demmings.

5. A correction of Plan Sheets #C001 and #C002 to indicate a corrected parcel ID of 29-23-30-4389-04-010 and the address of 3206 Warren Park Road, which are correct for the lakefront parcel;

OCPR Response: We agree with this condition and have made the necessary corrections to the plans.

 A correction on Plan Sheet #C002 to indicate the City of Belle Isle zoning district for the parcel as "Public Buildings District" (PUB);

OCPR Response: We agree with this condition and have made the necessary corrections to the plans.

7. A correction on Plan Sheet #C402 Notes under General Notes for Gangway and Kayak/Canoe System under #2 for each. These need to state the exact sizes requested on the site plan application and not be identified as minimums.

OCPR Response: We agree with this condition and have made the necessary corrections to the plans.

8. A detailed sign plan be provided indicating location of all signs. Signage must incorporate language clearly stating "no swimming" and "no boat mooring" and identification of park

hours and authorized use restrictions. Such signs shall also be additionally signs placed facing the water at the shoreline and on the terminal platform of the structure;

OCPR Response: We agree with this condition and have generated a sign plan that indicates the location of all signs listed that face the water at the shoreline and on the terminal platform of the structure within the revised and re-submitted Engineering Plans.

 A detailed parking/traffic plan be provided indicating how the applicant anticipates handling additional park traffic on Warren Park Road and canoe launch users accessing the park, whether there is any impact; and,

OCPR Response: We agree with this condition and have generated an exhibit illustrating parking and user access and egress from the Canoe Launch site. However, park users are currently using the lakeshore as a launching area for paddle boarding, canoeing, and kayaking. We do not foresee any additional user impact as a result of this Canoe Launch Platform addition beyond its current use.

10. A detailed safety element plan identifying where existing fencing and pedestrian gates are located, where they are proposed, and how such areas will be accessed by the public. This plan should also address how users of the canoe launch will access, including drop off of personal watercraft, the waterfront for use in the lake and how the area will be secured, monitored, and restricted during closed hours.

OCPR Response: We agree with this condition and have generated a plan exhibit to illustrate the existing fencing and gates and the existing crossing. There will be no watercraft drop off along Warren Park Road or Seminole Drive. All water craft drop off will take place within the existing Warren Park parking lot and the user shall utilize the existing gates and cross walk to access and egress from the Canoe Launch site. All canoes, kayaks, and paddle boards shall be walked over to the Canoe Launch area from this parking lot across the existing striped crossing.

The Board may consider any of these conditions or apply others as deemed appropriate by the Board. Please note that if additional plans or agreements are requested, the Board may want to review these prior to granting approval of a site plan.

## **Next Steps**

The Board may approve the proposed site plan application as it is, approve with specific conditions, continue the application if additional information is being requested for consideration, or deny the application.

A decision by the Board may be appealed by an aggrieved person to the City Council pursuant to Sec. 42-71.



Michael A. Register, Interim Executive Director David Daway, Maitland Service Center Director

601 South Lake Destiny Road, Suite 200 • Maitland, FL 32751 • (407) 659-4800 On the Internet at floridaswater.com.

May 22, 2015

Majid Kalaghchi 1053 N Orlando Ave Ste 3 Maitland, FL 32751-4470

Re: Boardwalk and Canoe Launch at Warren Park Exemption Request No. 141718-1

Dear Mr. Kalaghchi:

The St. Johns River Water Management District (District) received your Request for Verification of an Exemption (Form 62-330.050(1)) on Arpil 28, 2015. The activities you are proposing to conduct under an exemption involve installation of a public canoe launch and boardwalk of less than 1000 square feet over the water surface area that is more specifically described in your request.

Based on the information provided, the District has determined that the activities qualify for an exemption under Section 62-330.051(5)(b), F.A.C.. Therefore, the activities will not need a District permit.

Please be aware that this type of activity also requires Federal authorization for works in waters of the United States under Section 10 of the Rivers and Harbor Act of 1899 (33 USC 403), and Section 404 of the Clean Water Act (33 USC 1344). Your proposed activity as outlined on your application and attached drawings **QUALIFIES** for Federal authorization pursuant to the State Programmatic General Permit IV-R1 (SPGP IV-R1), and a SEPARATE PERMIT or authorization WILL NOT BE REQUIRED from the U.S. Army Corps of Engineers. Please note that the Federal authorization expires on July 25, 2016, and your project must be completed prior to that expiration date. You, as permittee, are required to adhere to all General Conditions and Special Conditions that may apply to your project. The Conditions for the SPGP IV-R1 are attached to this letter, including any applicable construction and species guidelines.

This verification is only for the activities described in the exemption request you submitted to the District. It does not apply if you revise the proposed activities after submitting your exemption verification request. Please contact District staff before starting construction if you wish to make any changes. In addition, please be advised that in order to be exempt, the activities must be conducted in accordance with all applicable performance standards and requirements for the above-referenced exemption. You are encouraged to contact District staff if you are uncertain about the applicable standards or conditions.

Please be advised that the District will not publish a notice in the newspaper advising the public that it has approved your request for verification of an exemption. If you wish to have certainty that the period for filing a challenge, under chapter 120, Florida Statutes, to the District's decision is closed, then you may publish, at your own expense, a notice in a newspaper of general circulation. Please contact me at (407) 659-4821 or by email at ddewey@sjrwmd.com for further information about this process.

Finally, this exemption verification only applies to the requirements of the District under chapter 373, Florida Statutes, and does not relieve you of the obligation to comply with any other state or local requirements for the activities. If you have any questions, please contact Bill Carlie at (407) 659-4833 or

## GOVERNING BOARD

ST. AUGUSTINE

Boardwalk and Canoe Launch at Warren Park May 22, 2015

Application No. 141718-1

wcarlie@sjrwmd.com. When referring to this project, please use the exemption request number listed above.

Sincerely,

William E. Carlie Jr., Compliance Coordinator

Maitland Service Center

Cc: David Dewey

## Orange County Parks and Recreation

## Warren Park Canoe Launch

Canoe Launch
Planning and Zoning Meeting
City of Belle Isle, Florida

November 14, 2016



## Agenda:

- Submittal Synopsis
- Site Location Map
- Project Narrative
- Existing Conditions at Launch Site
- Illustrative Site Plan
- Detail Site Plan
- Sketch Elevations and Section Drawings
- Priorities of Launch Development
- Project status
- Staff report review
- Questions and Answers



# Synopsis of Submittal and Information Booklets for P&Z Board

- Cover Sheet
- Submittal Synopsis for Canoe Launch
- Project Narrative
- Illustrative Site Plan
- Signed and Sealed Complete Engineering Plans
- Signed and Sealed Site Survey Plan
- Approved Code Compliant Engineering Plans
- St. Johns River Water Management District Exemption Letter
- Orange County Property Appraiser Ownership Report







## **Narrative**

- Low impact Launch for non motorized water craft only
- Extension of our Warren Park experience
- Reintroduce water borne recreation dimension
- Design that is Compliant to City of Belle Isle Code
- Square footage of design reflects this compliance
- Provide signage restricting use by motorized water craft
- Safety is our primary goal
- Maintaining a high quality relationship with our neighbors

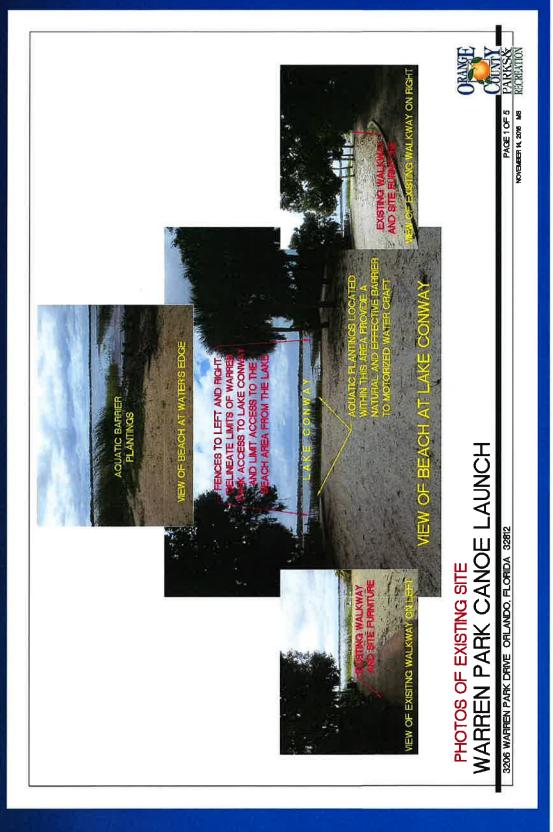


## **Existing Conditions at Launch Site**

- Fences to right (north) and left (south) help define the limits of the Launch area for Warren Park user
- Existing aquatic plantings at shoreline help inhibit motorized craft from using this Launch area
- Walkway and benches on north and south perimeters help bring park user to lakeshore to assist in monitoring while viewing the Lake



## **Existing Conditions at Launch Site**



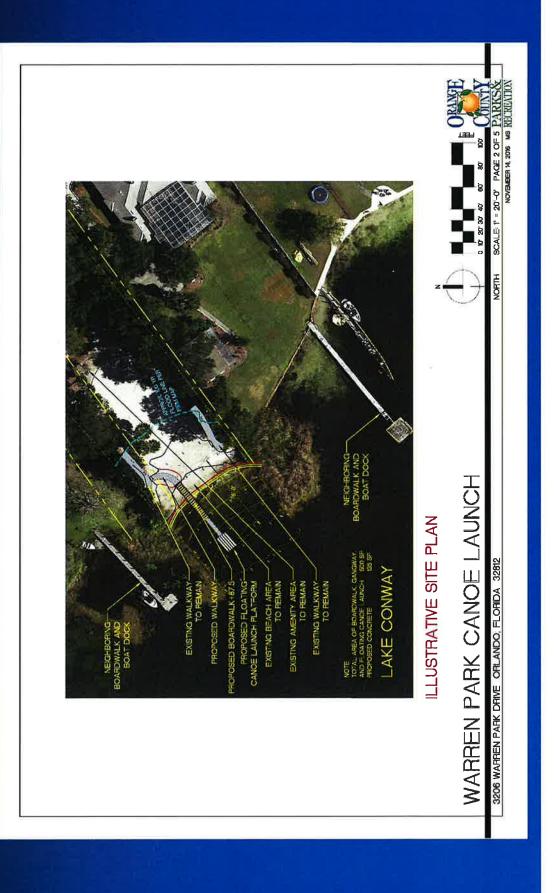


## **Illustrative Site Plan**

- Indicates neighboring docks and Lakeshore configurations to the north and the south and photographically shows dock lengths into Lake Conway
- Indicates existing contours from the Lake bottom to the FIRM Map approximate 100 year flood line
- Locates the existing perimeter concrete walks in relation to the proposed Canoe Launch
- Illustrates the proposed Canoe Launch configuration as designed within the submitted Engineering Plans
- Indicates total length and area of boardwalk, gangway, and floating Canoe Launch



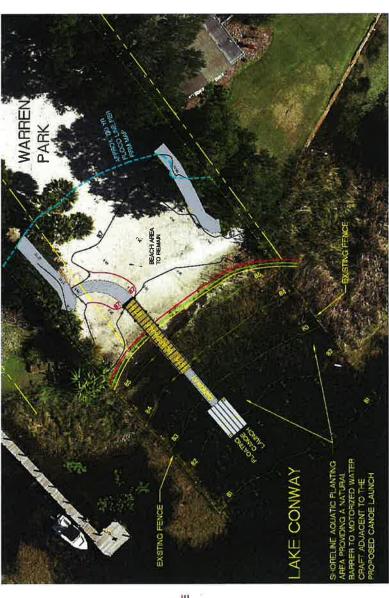
## **Illustrative Site Plan**





## **Detail Site Plan**





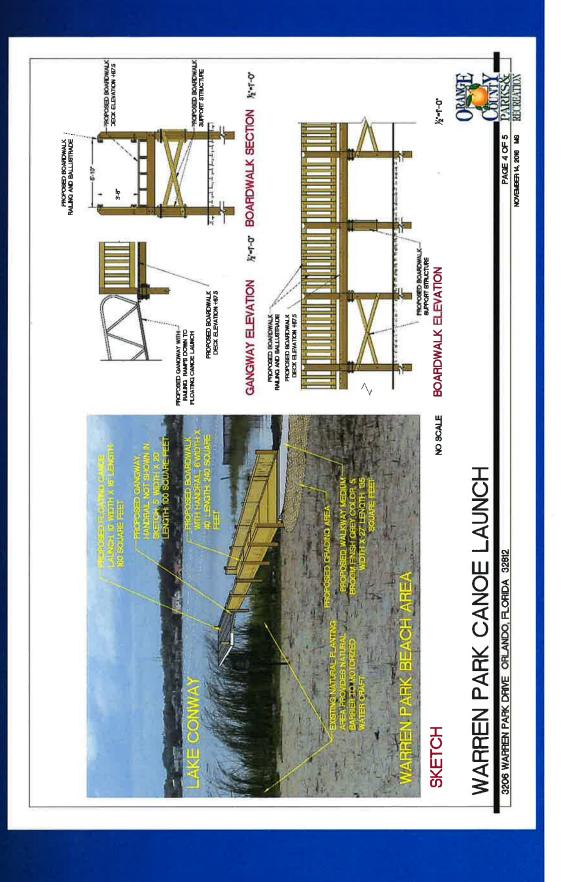
## DETAIL ILLUSTRATIVE SITE PLAN

WARREN PARK CANOE LAUNCH





## **Sketch Elevations and Section**





## **Parking and Safety Elements**

- Existing parking area shall remain the same, no significant change in use anticipated
- Canoe and Kayak users shall walk their water craft from existing parking to launch area
- Parks and Recreation will assess and address any impact on parking as it occurs
- The entire Park including the subject site are currently fenced and gated
- The public shall utilize the existing parking, gates, and crosswalk to access the launch site
- There will not be any special drop off areas located on the street and within the parking area
- At Park closing, all vehicular and pedestrian gates are locked
- The parks hours of operation will remain the same as shown within the existing signage
- Three no swimming signs are currently posted within the Launch site, one at the fence, one at the inner edge of the beach area, and one at the lakeshore
- Additional signage will be posted as shown within the revised Engineering Drawings



## Parking and Safety Element Plan





## **Priority List**

- quality recreational element that will safely benefit the residents of Belle Work within City of Belle Isle Land Development Code to produce a Isle and Warren Park users
- Provide quality safe and secure environment for all Launch users 2.
- Minimize impact to Lake and other Motorized Water Craft by restricting the launch user to non-motorized water craft ю :
- Reintroduce water borne recreation dimension to the Park user and extend the user experience into the Lake's aquatic environment 4.
- protect the property from unauthorized and unintended uses during and Post signage to prohibit motorized water craft from using this launch to after park hours 5.



## **Project Status**

## Where are we?

## Park Canoe Launch Development Steps:

- Meet with Planning and Zoning meeting for Plan review and approval
- Meet with City of Belle Isle City Council for Plan review and approval
- Design Construction Document Development: Complete
- Bidding and Permitting: 3 months
- Construction: 3 months
- Estimated Completion: Summer of 2017



Staff recommendations and Applicant responses



# Thank you for your time and consideration!

Are there any questions?



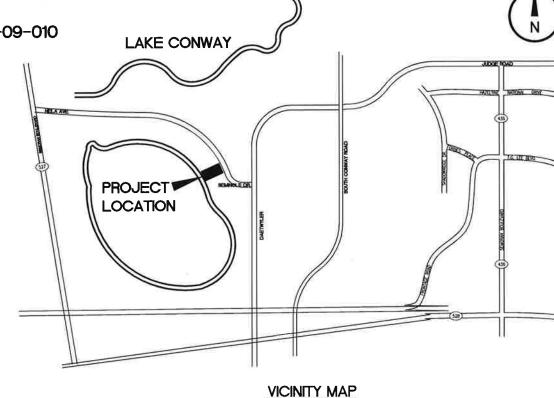
## WARREN PARK CANOE LAUNCH

3406 WARREN PARK ROAD, BELLE ISLE, FLORIDA ORANGE COUNTY, FLORIDA

PARCEL ID #

29-23-30-4319-09-010





## LEGAL DESCRIPTION:

A PORTION OF LOT 1, BLOCK D, LAKE CONWAY PARK, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK G, PAGE 138, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

## TERESA JACOBS

## **MAYOR**

DISTRICT 2

DISTRICT 3

DISTRICT 4

DISTRICT 5

DISTRICT 6

ORANGE COUNTY BOARD OF COUNTY COMMISSIONERS S. SCOTT BOYD DISTRICT 1

S. SCOTT BOYD BRYAN NELSON PETE CLARKE

JENNIFER THOMPSON

TED B. EDWARDS VICTORIA P. SIPLIN

## INDEX OF DRAWINGS

CS1 COVER SHEET
C001 OVERALL EXIST. SITE PLAN
C002 SITE DEMOLITION AND EROSION CONTROL PLAN
C101 SITE DEVELOPMENT PLAN
C401 BOARDWALK DETAILS
C402 GANGWAY, KAYAK LAUNCH GENERAL NOTES

## OWNER

ORANGE COUNTY CAPITAL PROJECTS 400 E. SOUTH ST., 5TH FLOOR ORLANDO, FL 32801 (407) 836-0050

## PLANNERS + ENGINEERS

SK CONSORTIUM, INC. 1053 N. ORLANDO AVE, SUITE 3 MAITLAND, FL 32751 (407) 629–4288

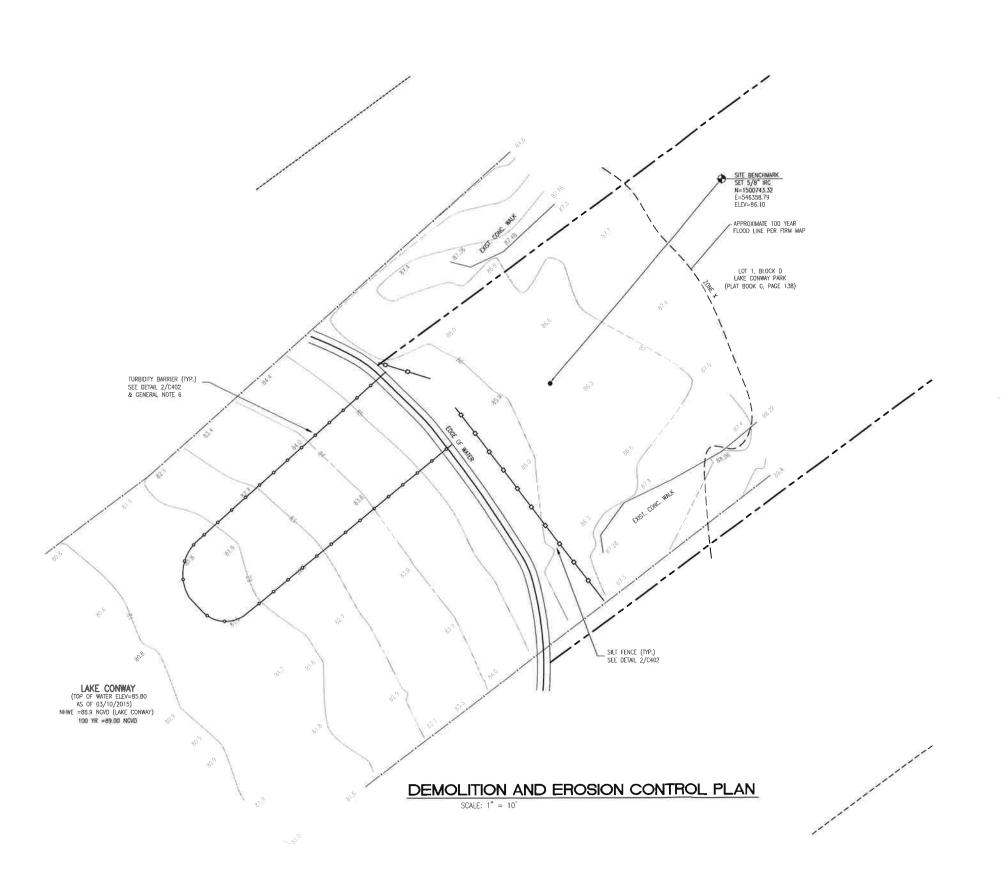
## **SURVEYORS**

SOUTHEASTERN SURVEYING AND MAPPING CORPORATION 6500 All American Boulevard Orlando, Florida 32810-4350 (407) 292-8580



1053 N. ORLANDO AVE. ■ SUITE 3 ● MAITLAND ▲ FLORIDA 32751 TELEPHONE 407-629-4288 FACSIMILE 407-629-1656 • EB# 7080





## **EXISTING SITE DATA:**

FLOOD ZONE NOTES

ADDRESS: 3206 WARREN PARK ROAD, BELLE ISLE, FLORIDA

PARCEL ID NO. 29-23-30-4389-04-010 PUB (PUBLIC ZONING DISTRICT)



## BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP (FIRM)NUMBER 12085CD430F, DATED 09/25/2009, THE ABOVE DESCRIBED PROPERTY IS WITHIN ZONE "X" AND ZONE "AE. SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- 1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS OF ORANGE COUNTY, AND ST, JOHNS RIVER WATER MANAGEMENT DISTRICT, EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN,
- CONSTRUCTION.

  3. SOIL MATERIALS, FROM WORK ON THIS PROJECT SHALL BE CONTAINED, AND NOT ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS, THESE INCLUDE BOTH NATURAL AND MAN—MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.

## PERMANENT EROSION CONTROL MEASURES

- A PERMANENT SODDING: ALL AREAS, WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL AS A MIN., BE
- SODDED.

  B. PERMANENT STORMWATER MANAGEMENT SYSTEM SHALL BE MAINTAINED, CLEANED AND INSPECTED IN ACCORDANCE WITH EPD PERMIT.

## INSPECTIONS:

- INSPECTIONS:

  A. AN INSPECTOR, CERTIFIED BY ORANGE COUNTY, IS REQUIRED TO INSPECT THE EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON APPROVED STORMWATER POLLUTION PREVENTION PLAN. INSPECTION REPORTS ARE TO BE COMPLETED ON ORANGE COUNTY'S FORM AND SUBMITTED ONCE EVERY WEEK AND AFTER EVERY RAINFALL OF 0,50° OR MORE DURING THE CONSTRUCTION PHASE.

  B. ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOME ONE APPOINTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOME ONE APPOINTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOME ONE APPOINTED BY THE SUPERINTENDENT, THE LEAST ONCE A WEEK AND FOLLOWING, ANY STORM EVENT OF 0.25 INCHES OR GREATER.

  C. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE—THIND THE HEIGHT OF THE FENCE.

  D. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT. TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

  E. A. MAINTENNICE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTION IS ATLACHED. THE REPORTS WILL BE KEFT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER. ENGINEER OR ANY FEDERAL STATE OR LOCAL ACENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORMWATER MANUCEMENT PLANS, THE REPORT SHALL BE MADE AND RETURNED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS INNALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL BE MEDIAL AND ANAILABLE UPON REQUEST TO THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS INNALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL BE MEDIANED. AND ENTITY ANY INCIDENTS OF NON-COMPLANCE.

  F. PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITED WAS INCIDENTED. WATER PO

## GENERAL NOTES

- ALL INFORMATION SHOWN ON THIS PLAN IS BASED ON INFORMATION PROVIDED BY SOUTHEASTERN SURVEYING AND MAPPING.
  CONTRACTOR IS RESPONSIBLE FOR SITE CLEARING WITHIN PROJECT LIMITS.
  CONTRACTOR IS RESPONSIBLE FOR SITE OF ALL UNDERGROUND UTILITIES AND IMPROVEMENTS PRIOR TO START OF CONSTRUCTION.
  CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL VEGETATION AND TREES INTERFERING WITH NEW IMPROVEMENTS.
  THE LOCATION/EXTENT OF SILT FENCE SHOWN IS FOR INFORMATION ONLY. COORDINATE EXACT LOCATION WITH DESPONSIBLE FOR PRIMACE/FARTHWORK LIMITS. SITE IMPROVEMENTS. & CONSTRUCTION PLASSING.

- WITH RESPECT TO CLEARING/EARTHWORK LIMITS, SITE IMPROVEMENTS & CONSTRUCTION PHASING. UTILIZE TWO ROWS OF TURBIDITY BARRIERS WITH RIDGED FRAME BETWEEN THE TOW BARRIERS. WHEN INSTALLING PILINGS, BE PREPARED TO IMPLEMENT TURBIDITY CONTRL WITHIN BARRIERS IN EVENT IF A CLAY OR MUCK LAYER IS ENCOUNTERED.

## TEMPORARY EROSION CONTROL MEASURES

- A. FILTER FABRIC BARRIERS SHALL BE USED AT THE PERIMETER/LIMITS OF THE PROPOSED CONSTRUCTION TO PREVENT SEDIMENTATION FROM LEAVING THE PROJECT BOUNDARIES OR DISCHARGE INTO OFF SITE DRAWAGE FACILITIES.

  STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.

  C. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF—SITE SHALL BE PROTECTION: INCETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF—SITE SHALL BE PROTECTION: INCETS AND CATCH BUILT.

  1. TEMPORARY SEEDING AND MULCHING FUNIT. THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.

  1. TEMPORARY SEEDING AND MULCHING: AREAS OPEND BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVANTED OR DRIESSED AND RECEIVE FINAL, CRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WHILE NOT LATTER COMPETE WITH THE PERMANENT GRASSING, SLOPES STEEPER THAN 61 THAT FALL WITHIN THE CATCEORY ESTABLISED IN PRAEGRAPH "C" AROVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOUSE MEASURE OF MULCH MALERAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
- MUI.CH.

  MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND
  SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY
  WHERE ORIGINALLY DESIGNED AND CONSTRUCTED.
- GRAVEL CONSTRUCTION ENTRANCE SHALL BE INSTALLED TO A MIN. DEPTH OF 6" INCHES TO PREVENT SEDIMENT FROM LEAVING CONSTRUCTION SITE. AND REMOVE AS DIRECTED BY OWNER.

LEGEND EXIST. 1	TO BE REMOVED
ASPHALT PAVEMENT	
CONCRETE WALK	
CONCRETE CURB SIGN	
CHAIN LINK FENCE —X——X—	
WATER LINE	
SANITARY SEWER LINE SS-	
STORM DRAIN LINESD	
POWER POLE PP	
LIGHT POLE OLP	
FIRE HYDRANT	
OAK TREE	

Seat: Majid Kologhchi P.E. 41045

SKConsortium, Inc.

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PLAN

CONTR CONWAY **EROSION** LAKE AUNCH

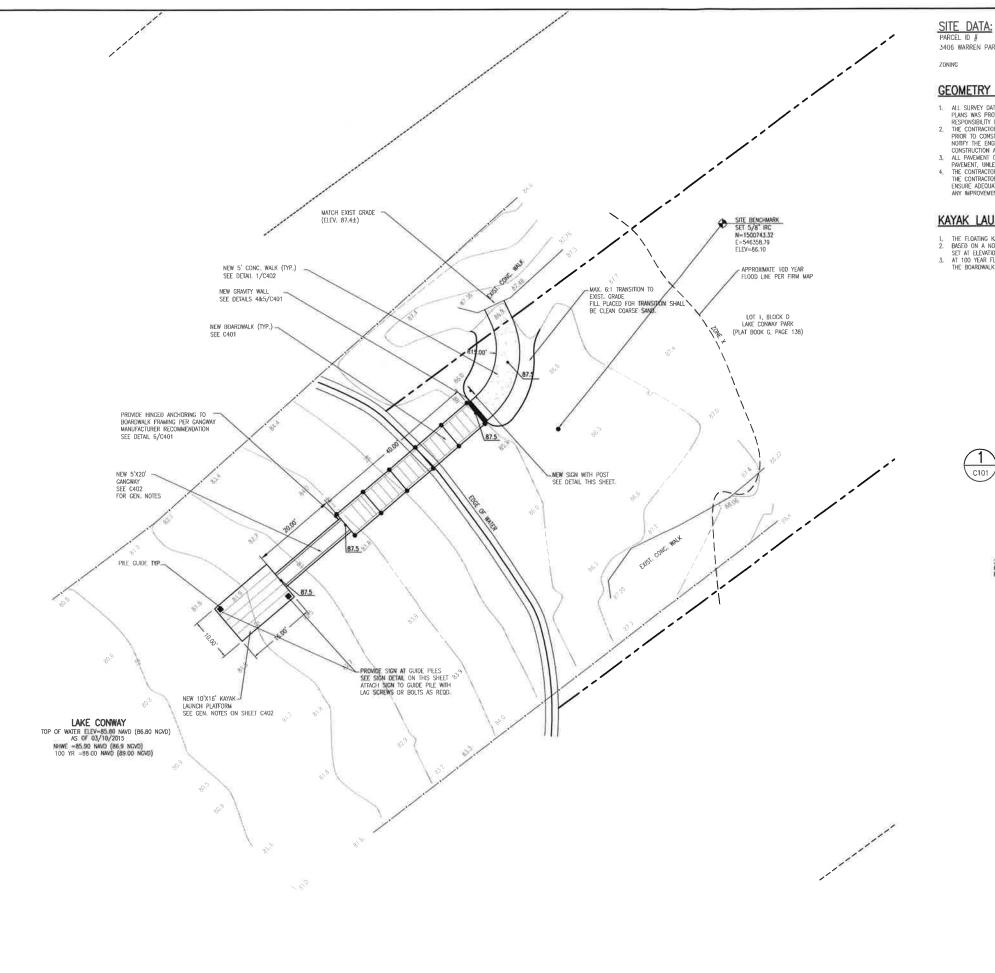
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DEMOLITION O 100X SUBMITTAL FOR REVIEW 3-24-15 BD/PERMIT SET 4-6-15 REVISED PER COMMENTS 10-21-16

1504 M. KALAGHCHI

C002



29-23-30-4319-09-010

3406 WARREN PARK ROAD, BELLE ISLE, FLORIDA

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## **GEOMETRY NOTES**

- 1. ALL SURVEY DATA USED AND CONDITIONS ASSUMED TO BE PRESENT IN PREPARATION OF THESE PLANS WAS PROVIDED BY SOUTHEASTERN SURVEYING. S.K. CONSORTIUM, INC, DOES NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THIS DATA.

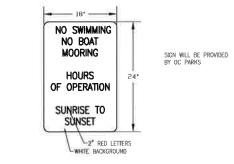
  1. THE CONTRACTOR SHALL VERIFY AND LOCATE ALL VERIFICAL AND HORIZONTAL CONTROL POINTS PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES SHOULD BE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SURVEYOR OF THE CONDITION IN WRITING PRIOR TO COMMENCING HIS CONSTRUCTION ACTIVITIES.

  3. ALL PAVEMENT OFFSETS, RODI AND DIMENSIONS SHOWN ARE TO PROPOSED EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.

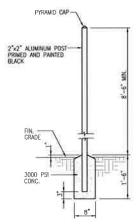
  4. THE CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE GEOMETRIC DATA PROVIDED, IT IS THE CONTRACTOR SHOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL, PRIOR TO THE INSTALLATION OF ANY IMPROVEMENTS.

## KAYAK LAUNCH/GANGWAY FINISH GRADES

- 1. THE FLOATING KAYAK LAUNCH PLATFORM IS DESIGNED WITH 16" TO 20" FREEBOARD.
  2. BASED ON A NORMAL HIGH WATER ELEVATION OF 85.9 AT LAKE COMMAY, THE PLATFORM WILL BE SET AT ELEVATION OF 87.50 WHICH WILL RESULT WITH A GANGWAY AT NO SLOPE.
  3. AT 100 YEAR FLOOD STACE OF THE LAKE, THE PLATFORM WILL BE AT ELEVATION 89.50, HOWEVER THE BOARDWALK WILL NOT BE ACCESSIBLE AT THIS ELEVATION.









<u>LEGEND:</u>	<u>EXIST.</u>	NEW
ASPHALT PAVEMENT	\	
CONCRETE WALK		7.44.10
CONCRETE CURB  CONC. CURB & GUTTER		
FENCE LIGHT POLE	- <del>* * * *</del>	
FIRE HYDRANT POWER POLE SIGN	QFH PP	



SKConsortium, Inc.
NO NE.\* SUIT 3 \* MAILAND \* FLORIDA 27751
07-629-4288 \* FACSIMILE 407-629-1656 \* EB# 7080

Seol: Majid Kalaghchi P.E. 41046

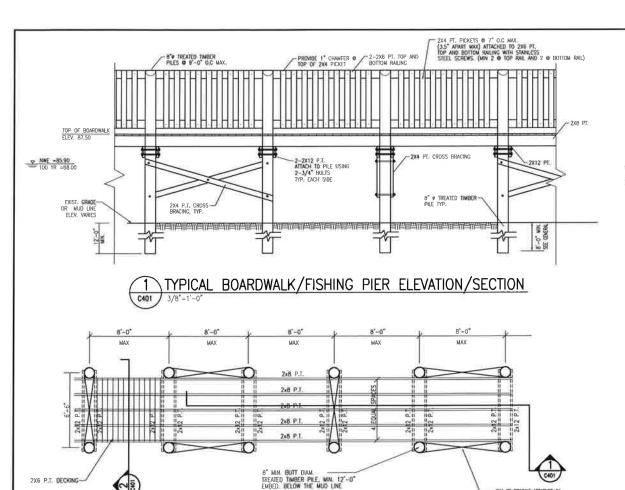
CONWAY LAKE LAUNCH ATWARREN PARK CANOE

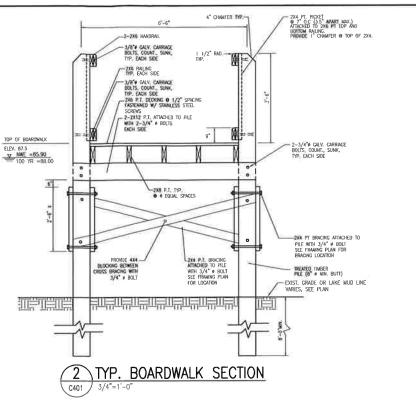
PLAN

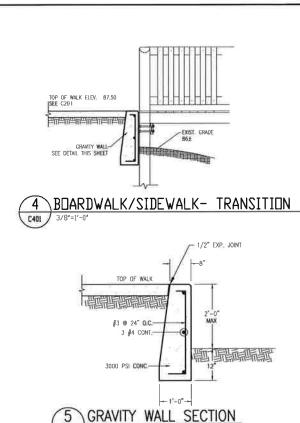
SITE 100% SUBMITTAL FOR REVIEW 3-24-15 BIO/PERMIT SET 4-6-15 REVISED PER COMMENTS 10-21-16 1504

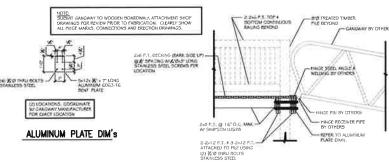
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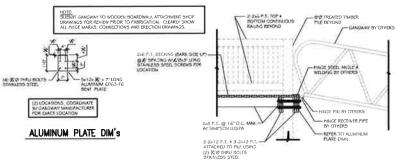








6 BOARDWALK/GANGWAY CONNECTION



## GENERAL NOTES, DESIGN LOADS FOR BOARDWALK

- CENERAL NOTES

  1. A PILE BEARING CAPACITY OF 3 KIPS HAS BEEN ASSUMED.

  2. ALL LUMBER SHALL BE NO.2 SOUTHERN YELLOW PINE OR BETTER.
- 3 ALL BOLTS AND CONNECTIONS SHALL BE HOT PIPPED GALV STEEL OR STAINLESS STEEL
- 4. ALL PRESSURE TREATED LUMBER SHALL BE IN ACCORDANCE WITH AMERICAN WOOD PRESERVERS ASSOCIATION.
- TIMBER PILES SHALL BE TREATED IN ACCORDANCE WITH SECTION 1809,1,2, PRESERVATIVE AND MINIMUM FINAL RETENTION SHALL BE IN ACCORDANCE WITH AWPA C3 FOR ROUND TIMBER PILES, PILES CUT OFFS SHALL BE TREATED IN ACCORDANCE WITH AWPA M4,
- 6 EACH PIECE OF LUMBER SHALL BE IDENTIFIED WITH A QUALITY MARK OR END TAG BEARING THE NAME OF THE INSPECTION AGENCY, PRODUCT CLASS, PROCESS, USE EXPOSURE AND RETENTION VALUES.
- ALL LUMBER IN TRANSIT, STORAGE AND HANDLING SHALL BE PROTECTED FROM MOISTURE, WEATHER AND CONTAMINANTS.
- 8. ALL LUMBER PRODUCT SHALL BE TREATED ALXALINE COPPER QUATERNARY (ACQ).
  PRESERVATIVE—TREATED WOOD WITH WATER REPELLENT COMPONENT CONTAINING
  NO ARSENIC OR CHROMIUM IN COMPLIANCE WITH AWPA STANDARD VI
  RETENTION RATES SHALL BE AS FOLLOW: WOOD DECKING: 0,4 PCF WOOD PILING: 2,5 PCF
- 9 DESIGN LIVE LOAD: DECK/PLACE OF ASSEMBLY PER FBC 2010 TABLE 1607.1: 100 PSF
- 10. CONTRACTOR SHALL COORDINATE THE TOTAL LENGTH OF BOARDWALK WITH RESPECT TO MAXIMUM PILE SPACING
- 11. DESIGN VALUES ARE BASED ON SOUTHERN PINE LUMBER WITH A MOISTURE
- 12, MINIMUM PILE EMBEDMENT IS 8'-0" BASED ON MINIMUM DESIGN LOAD OF 3 KIPS PER PILE AND 85 PSF LIVE LOAD

## DESIGN LOADS

TYPICAL BOARDWALK FRAMING PLAN

PER FLORIDA BUILDING CODE 2015 EDITION ULTIMATE DESIGN WIND VELOCITY = 140 MPH, 3 SEC, GUST NOMINAL DESIGN WIND VELOCITY = 109 MPH, 3 SEC, GUST RISK CATEGORY II

DESIGN LIVE LOAD: 85 PSF FOR PEDESTRAIN BOARDWALK/OVERLOOK RAILING HAS BEEN DESIGNED FOR A UNIFORM LOAD OF 50 PLF INCLUDING TRANSFER OF THE LOAD TO THE STRUCTURE. RALLING ASSEMBLY HAS BEEN DESIGNED TO RESIST A SINGLE CONCENTRATED LOAD OF 200 LBS APPLIED IN ANY DIRECTION AND HAVE ATTACHMENTS AND SUPPORTING STRUCTURE TO TRANSFER THIS LOAD TO THE PILING.

## HARDWARE SCHEDULE

- 1. CONTRACTOR SHALL VERIFY ALL COMPONENTS OF HARDWARE SCHEDULE PRIOR TO START OF CONSTRUCTION.
- 2. CARRIAGE BOLT
- 3/4" X 12" #BCAR-075-1200G
- 3/4" X 14" #BCAR-037-10000
- MANUFACTURED BY REYNOLDS OR ACCEPTED EQUAL
- 3. STAINLESS STEEL SCREWS #10, 3" SWANEZE, BY SWAN SECURE PRODUCTS INC. OR ACCEPTED EQUAL
- #8, 2 1/2" SWANEZE, BY SWAN SECURE PRODUCTS INC. OR ACCEPTED EQUAL THE ABOVE HARDWARE SCHEDULE IS NOT ALL INCLUSIVE OF SIZES REQUIRED FOR ASSEMBLY OF THE BOARDWALK. IT IS GIVEN FOR INFORMATION ONLY.

## CONWAY LAUNCH **DETAIL**8 AT BAORDWALK CANOE I 100X SUBMITAL FOR REVIEW 3-24-15 BO/PERMIT SET 4-6-15

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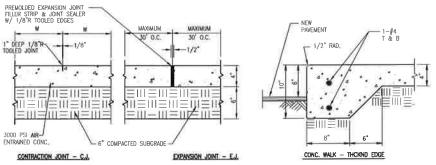
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NOTES: 1 A THICKENED EDGE SHALL BE PROVIDED BETWEEN SIDEWALK AND DRIVEWAYS OR PARKING LOT. SLOPE CONC. SIDEWALKS AWAY FROM BUILDINGS TO PROVIDE POSITIVE DRAINAGE.

3\_ PROVIDE 2% CROSS SLOPE ON CONC. WALKS TYP.

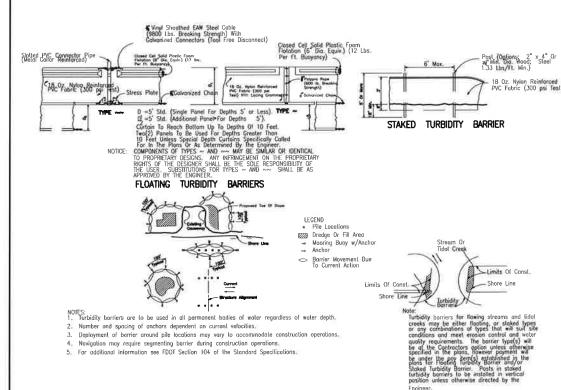
4. PROVIDE CONTROL JOINTS @ INTERVALS EQUAL TO

SIDEWALK WIDTH (W). 5. PROVIDE PREMOLDED EXPANSION JOINT WHERE CONC.

WALK ABUTS BLDG, POLES, AND OTHER CONC, WALKS

6. PROVIDE LIGHT BROOM FINISH APPLIED PERPENDICULAR TO WALK EDGES.





TURBIDITY BARRIER APPLICATIONS

## GENERAL NOTES-GANGWAY

DESIGN BASIS USED FOR GANGWAY RAYENS MARINE INC.
3295 OLD DIXIE HWY
KISSIMMEE, FLORIDA 34744
407-935-9799
1-800-676-3023
MODEL: MARINER 1 JACKSONVILLE, FL 904-358-3362 ATLANTIC ALUMINUM AND MARINE PRODUCTS
221 SOUTH 3RD STREET
LANTANA, FLORIDA
561-310-4360

GANGWAY SHALL BE 5 FEET WIDE BY 20' LONG.

GANGWAY SHALL BE 5 FEET WIDE BY 20° LONG, GANGWAY SHALL BE CONSTRUCTED OF ALUMINUM COMPONENTS AND SHALL BE PROVIDED AND INSTALLED BY SAME MANUFACTURER AS FLOATING DOCK SYSTEM, CONTRACTOR SHALL PROVIDE CERTIFIED FABRICATION DRAWINGS FOR REVIEW AND APPROVAL BY

ENGINEER AND OC GANGWAY MANUFACTURER SHALL PROVIDE ALL NECESSARY PLANS AND SPECS TO OC COMMERCIAL

PLAN REVIEW FOR PERMITTING.
6. DESIGN LIVE LOAD SHALL BE MIN. 50 PSF

## GENERAL NOTES-KAYAK LAUNCH SYSTEM

1. FLOATING DOCK SHALL BE A TIMBER SYSTEM AS MANUFACTURED BY:

407-935-9799 MODEL: MARINER 1 APPROVED EQUALS BELLINGHAM MARINE 1813 DENNIS STREET ATLANTIC ALUMINUM AND MARINE PRODUCTS

RAVENS MARINE INC. 3295 OLD DIXIE HWY KISSIMMEE, FLORIDA 34744

2. FLOATING DOCK SHALL BE 10 FEET WIDE BY 16 FEET LONG WITH MIN, 18-20 INCHES OF FREEBOARD WITH DEADLOAD IMPOSED,

THE DECK AND FRAME STRUCTURAL COMPONENTS OF FLOATING DOCKS AND GANGWAYS SHALL BE DESIGNED WITH MINIMUM SAFETY FACTORS ON WORKING STRESS WHICH CONFORM TO THOSE SET FORTH IN THE LATEST ISSUE OF ALUMINUM ASSOCIATED "SPECIFICATIONS FOR ALUMINUM STRUCTURES". THE MANUFACTURER/SUPPLIER SHALL HAVE A MINIMUM OF 5 YEARS CONTINUOUS EXPERIENCE IN COMMERCIAL PIER, DOCK AND

ENGINEERING CALCULATIONS SHOWING COMPLIANCE WITH THE DESIGN CRITERIA SPECIFIED HEREIN SHALL BE PROVIDED BY A REGISTERED PROFESSIONAL ENGINEER AND DEPICT COMPLIANCE WITH COMBINED LIVE AND DEAD LOAD REQUIREMENTS CONSIDERING THE LOADS AND FREEBOARD REQUIREMENTS.

TYPICAL SECTIONS AND DETAILS FOR FLOATING DOCKS, INCLUDING FLOATION SYSTEM, GANCWAYS, CONNECTIONS, HANDRAILS, ANCHORAGE SYSTEMS, DECKING MATERIAL, CLEATS LOCATION AND CONNECTION DETAILS, ETC, SHALL BE PROVIDED ON CERTIFIED SHOP DRAWINGS.

ALUMINUM EXTRUSIONS FOR PIER, DOCK AND GANGWAY STRUCTURES SHALL BE ALUMINUM ALLOY 6061-T6 AND BE EXTRUDED IN ACCORDANCE WITH THE REDUIREMENTS OF APPLICABLE SECTIONS OF FEDERAL SPECS QQ-A-200

FEDITATION MODILIE SHALL BE HIGH DENSITY, HIGH MOLECULAR WEIGHT ONE PIECE, AND NO SEAM VIRGIN POLYETHYLENE WITH CARBON 2 UV RESULTION INSURED STREET DETROIT DETROIT, RIGHT MOLECULAR MEASHT ONE PIECE, AND NO SEAM VIRON POLYETHYLENE WITH CARBON REY INHIBITORS, THE STANDARD WALL THICKNESS SHALL BE 0,150", THE FOAM CORE SHALL BE EXPANDED POLYSTYRENE WITH A MINIMUM DENSITY OF 1,2 LBS PCF.

CLEATS SHALL BE COMPOSED OF ALMAG 35 CAST ALUMINUM ALLOY MEETING THE REQUIREMENTS OF FEDERAL SPEC QQ-A-571F AND

STAINLESS STEEL BOLTS, RODS, NUTS WASHERS AND SCREWS SHALL BE TYPE 304

WOOD DECKING AND FRAMING SHALL BE SOUTHERN PINE NO. 1 STRUCTURAL STRESS GRADE WITH A MINIMUM CCA OF 0.4. ALL WOOD SHALL COMPLY WITH AMERICAN SOFTWOOD LUMBER STANDARDS PS 20-70. EACH PIECE OF LUMBER SHALL BE IDENTIFIED BY GRADE AND TREATMEN MARK. ALL TREATED LUMBER SHALL MEET THE REQUIREMENTS OF AMERICAN WOOD PRESERVERS BUREAU AWPB LP-22.

ROLLERS FOR EITHER PILE GUIDES OR GANGWAYS SHALL BE UHMW POLYURETHANE WITH BLACK ULTRA-VIOET LIGHT INHIBITOR

HINGED OR BOLTED FLOATING DOCK MODULE CONNECTOS SHALL BE ABLE TO WITHSTAND A LOAD OF 3000 LBS APPLIED TO THE FULL

ANCHORING DEVICES FOR FLOATING DOCKS SHALL ALLOW FREE MOVEMENT OF THE DOCK WHILE MINIMIZING DAMAGE DUE TO NORMAL DOCK MOVEMENT CAUSED BY TIDES, BOAT WAKES, WATER FLUCTUATION OR SEASONAL WINDS,

WOOD DECKED FLOATING DOCKS SHALL BE DESIGNED THAT THE WOOD DECKING SHALL NOT HAVE AN UNSUPPORTED LENGTH EXCEEDING 36 NOVES AND SMALL BE SECURED BY A MINIMUM OF 2 EACH #14 TYPE JON SS SELF TAPPING SCREWS AT EACH SUPPORT. THE WOOD DECKING FLOATING DOCKS SHALL BE DESIGNED TO WITHSTAND A UNIFORM LIVE LOAD OF 20 LISE/SF. FLOATING NIALL BE A MIN. OF 20 UNDER THE DEAD LOAD AND 10 WITH COMBINED DEAD LOAD AND 10 WITH COMBINED DEAD LOAD AND 40 LISE OF CONCENTRATED LOAD WINDSCE ANYMHERE WITHIN THE DECK ADDITIONAL FLOATING SHALL BE PROVIDED TO SUPPORT COMBINED DOCK AND GANGWAY LOADS WITHOUT CREATING UNDUE DISTORTION IN THE DOCK.

PILING GUIDES
ALL PILING GUIDES SHALL BE DESIGNED TO APPROPRIATELY RECEIVE ANCHORING SYSTEM EITHER INTERNAL OR EXTERNAL WITH ONE OR MORE OF THE FOLLOWING: - DELRIN BLOCKS, JHMW BLOCKS, S/S OR HD GALV, PILE GUIDE, ALUMINUM PILE GUIDE, S/S CAGE GUIDE,

ALL DECKING (SYP) SHALL BE OF HIGH QUALITY WITH EASED EDGES AND REMILLED ENDS. ALL DECKING SHALL BE PRE-DRILLED WITH APPROPRIATE COUNTERSINK TO RECEIVE DECKING FASTENERS PRIOR TO INSTALLATION.

LIVE LOADS
FLOATING PIERS, DOCKS UP TO 50 PSF OR 500 LBS CONCENTRATED LOAD ON ANY 2 FEET SQUARE,
THE DOCK SHALL HAVE NOT MORE THAN SIX DEGREES TILT FROM THE HORIZONTAL UNDER A UNIFORM LIVE LOAD OF ONE HALF OF THE PIER
WIDTH OR UNDER CONCENTRATED LOAD OF 400 LBS APPLIED TO ONE SIDE,

DEAD LOADS
THE WEIGHT OF THE COMPONENT PARTS OF THE STRUCTURE AS WELL AS RAMPS, DOCK BOXES, UTILITIES, CANGWAY AND OTHER ACCESSORIES
SHALL BE USED IN THE DESIGN OF THE DOCK SYSTEM, FLOTATION SHALL BE DESIGNED TO SUPPORT THE DEAD LOAD PLUS UP TO 50 PSF LIVE
LOAD APPLIED TO THE ENTIRE AREA OF THE DECK SURFACE.

LINDER THE DEAD LOAD THE FLOATING DOCKS SHALL HAVE A MINIMUM OF 18"-20" FREE BOARD.

WIND LOADS ALL DECK STRUCTURES AND PARTS SHALL BE DESIGNED TO WITHSTAND WIND FORCES AS SPECIFIED BY ASCE 7-10 FOR FLORIDA WIND VELOCITIES, WIND PRESSURE SHALL BE ASSUMED TO ACT NORMAL TO ALL THE SURFACES CONSIDERED, NO COMPONENT SHALL BE DESIGNED

IMPACT LOAD TO INCLUDE LIVE LOADS WHICH INDUCE UNUSUAL IMPACT AND LATERAL LOADING. THE ASSUMED KINETIC ENERGY EXERTED BY A STRIKING VESSEL AT 15' OFF CENTERLINE IS TO BE USED AT NORMAL MARINE VELOCITY OF 3 FT/SEC.

3, 2-8" DIAMETER TIMBER PILES SHALL BE PROVIDED AT FLOATING DOCK SYSTEM. THE TIMBER PILES SHALL BE EMBEDDED A MINIMUM OF 8' BELOW THE MUD LINE OF THE CANAL, PILES ARE TO BE EXTENDED 4' ABOVE THE PLATFORM, PROVIDE PVC OR VINYL CAP AT EACH PILE.

- 4. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FROM MANUFACTURER FOR REVIEW AND APPROVAL BY OCCP AND EPD.
- 5, THE FLOATING DOCK/GANGWAY MANUFACTURER SHALL BE RESPONSIBLE FOR PREPARING ALL NECESSARY DRAWINGS/SPECIFICATIONS FOR PERMITTING THROUGH AUTHORITY HAVING JURISDICTION.
- 6. PROVIDE 4 CLEATS AT THE PLATFORM AS PER MANUFACTURER REQUIREMENTS.



Majid Kaloghchi P.E. 41046

GANGWA

CONWAY HOH ഗ LAKE LAUNCH GEN. က် M ANOE

ATWARREN ORANGE

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