



**CONSULTING ENGINEERING & SCIENCE, INC.**

**Civil Engineers**

**Coastal Engineers**

**Environmental Scientists**

August 11, 2016

**VIA FEDERAL EXPRESS**

Ms. Michelle Decker  
Broward County  
Environmental Protection and  
Growth Management Department  
1 North University Drive  
Plantation, Florida 33324

Re: Project USA, LLC  
Stirling Marina and Boat Sales  
ERL Application No. DF14-1226



Dear Ms. Decker:

We are in receipt of your email dated February 3, 2016 requesting additional information in conjunction with the above reference permit application. Please accept this letter as our response to your second request for additional information. The following are our responses according to the item numbers in your request for additional information:

1. We have completed Section D of the permit application. Please find enclosed a copy of that section along with a check in the amount of \$1,500.00 as payment for the application fee.
2. At this time, we have not submitted to the County's Surface Water Management Program but plan to do so in the near future.
3. There are no dry stack storage or dry slips proposed. There will be new models of boats on cradles in the showroom of the sales area. These boats will be for display only and will not be put into the water. Test drive boats will be available in the wet slips for use by prospective purchasers.
4. The twelve (12) proposed wet slips will be available for test drive boats for use by prospective purchasers.
5. No further comments.
6. We are unable to provide a response to this Item at this time due to scheduling problems to conduct a detailed field survey of the mangroves that are located along the shoreline. Based upon previous site visits, it appears that there are approximately thirty (30) white mangroves scattered along the

**FEE STATEMENT**

**APPLICANT INFORMATION**

*Lodka House, Inc.*  
 APPLICANT/DEVELOPER NAME  
*3405 N. Ocean Dr*  
 ADDRESS  
*Hollywood, FL 33019-3805*  
 CITY & ZIP CODE

TELEPHONE

PLAT/PROJECT NAME

PLAT/PROJECT NO.      PLAT BOOK & PAGE NO.      SCHOOL ZONE

Impact Fee Agreement(s) —      N.A.       Road       School       Park

Type of Security —      N.A.       Letter of Credit       Bond       Lien

**FEES**

AMOUNT	ITEM	VALIDATION
800	DF14-1226      1030/1305	Broward County Board of County Commissioners Environ Lic & Bldg Permittins ===== Date: 9/1/2016 11:11 AM Cashier: ajawahir Batch No: 1306      Trans No: 19 Rcpt No: 00069814      Inv No: Payment: \$800.00 ===== 1305 Dredse & Fill      \$800.00 CK 1408      \$800.00 =====
800	<b>TOTAL</b>	

The fees above are due and payable to:  
 BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS

**THIS STATEMENT BECOMES A RECEIPT WHEN STAMPED BY A REGISTER**

Authorized Signature: *[Signature]*

shoreline. Of this total approximately 50% have disease and are stressed. Many of the trees have fallen over into the water due to erosion of the canal bank. Most of these mangroves will be removed in conjunction with the project. We hope to complete the field work and prepare our response to this Item within the next four (4) weeks. We have set aside an area at the south end of the site for use as a mitigation area. It has been some time since we were on site. Therefore, we are in the process of revisiting the site to conduct ground truthing in order to have up to date field data for use in responding to this Item 6 in the RAI. We have attached a check in the amount of \$800.00 as payment for the remainder of the initial license fee.

7. No further comments.
8. No further comments.
9. No further comments.
10. No further comments.
11. No further comments.
12. No further comments.
13. No further comments.
14. No further comments.
15. The proposed fueling facilities will consist of one (1) 100-gallon above ground storage tank with containment for gasoline and one (1) 100-gallon above ground storage tank with containment for diesel. We have indicated the location of these tanks on Sheet 5 of 17 of the permit sketches.
16. We will pay the balance of the new slip fee in the amount of \$5,369.28 prior to issuance of the license.
17. We are planning to submit to the Corps of Engineers in the near future.
18. The proposed project will include the installation of vertical seawalls that will require the placement of rip-rap. Accordingly, we have revised Sheets 8 and 10 of 17 to include the installation of rip-rap in front of the seawalls. We have also added two (2) sections of rip-rap for shoreline stabilization at the north and south ends of the site. These areas are shown on Sheet 16 of 17.

Ms. Michelle Decker  
August 11, 2016  
Page 3

19. We are aware of the requirements for turbidity controls and monitoring during dredging and will abide by the conditions indicating procedures required by the County. We have shown the location of the turbidity curtains on Sheet 13 of 17.
20. We have been contacted by the FFWCC Office of Imperiled species to provide additional information that they requested to assist them with their manatee impact review.
21. The South Florida Waster Management District issued a Right-of-Way Occupancy Permit for the project on December 15, 2015. We have attached a copy for your records.

We have also attached two (2) signed and sealed copies of the permit sketches that have been revised in accordance with review comments as stated in the RAI.

We hope that this information will be adequate for your use. Should you have any questions, or require additional information, please contact our office.

Very truly yours,

CONSULTING ENGINEERING & SCIENCE, INC.



John R. Guttman, P.E.  
President

JRG:agm

(14035)

Attachments

3



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

## Right of Way Occupancy Notice of Permit

**Document Prepared By:**

South Florida Water Management District

**RE: Legal Description:** SYMONS PLAT 82-49 B TR A LESS BEG SE COR OF SAID TR, W 14, NE 35.39 TO E/L OF TR A, SLY 32.50 TO POB

BROWARD COUNTY, FLORIDA, PUBLIC RECORDS

**Notice**

The South Florida Water Management District (District) hereby gives notice that Right of Way Occupancy Permit (Permit) No. 14529 has been issued to Project USA, LLC (Permittee). Permittee owns real property described above. The Permit authorizes Permittee to use a segment of the District's right of way as provided in the Permit's Limiting and Special Conditions. A copy of the Permit is on file in the Right of Way Section at District Headquarters, 3301 Gun Club Road, West Palm Beach.

The Permit contains, in part, the following statement:

**This Permit is issued by the District as a license to use or occupy District works or lands. It does not create any right of entitlement, either legal or equitable, to the continued use of the District works or lands. Since this Permit conveys no right to the continued use of the works or lands, the District is under no obligation to transfer this Permit to any subsequent owner. By acceptance of this Permit, the Permittee expressly acknowledges that the Permittee bears all risks of loss as a result of the revocation of this Permit.**

**Transfer of Permit**

Upon the sale of Permittee's property described above, Permittee shall remove the encroachments from the right of way and restore the right of way to its pre-existing condition or, pursuant to Rule 40E-6.351, Florida Administrative Code, request the District transfer the Permit to the new owner of the property. Notification of the transfer does not by itself constitute a permit transfer. Therefore, purchasers of the above described property are notified that it is unlawful to make use of District works or lands without first having obtained a permit transfer or a right of way occupancy permit from the District in the purchaser's name.

**Conditions**

The Permit is subject to Limiting Conditions set forth in Rule 40E-6.381, Florida Administrative Code. The Permit also contains additional Special Conditions. Accordingly, interested parties should closely examine the entire Permit and any subsequent modifications.

**Conflict Between Notice and Permit**

This Notice of Permit is not a complete summary of the Permit. Provisions in this Notice of Permit shall not be used in interpreting the Permit provisions. In the event of conflict between this Notice of Permit and the Permit, the Permit shall control.

**This Notice is Not an Encumbrance**

This Notice is for informational purposes only. It is not intended to be a lien, encumbrance, or cloud on the title of the above described property.

(12/2007)

SFWMD - 3301 Gun Club Road - West Palm Beach, FL 33406

[sfwmd.gov](http://sfwmd.gov)  
Page 1 of 2


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**Release**

This Notice may not be released or removed from the public records without the prior written consent of the South Florida Water Management District.

This Notice of Permit is executed on this 15 day of December, 2015.


South Florida Water Management District

  
Deputy District Clerk

South Florida Water Management District contact: Section Administrator, Right of Way (ROW)

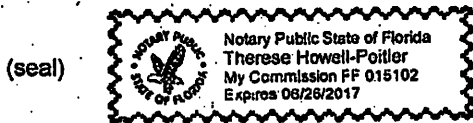
STATE OF FLORIDA  
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this 15 day of December, 2015 by Elw Cueto as Deputy District Clerk of the South Florida Water Management District, a public corporation, on behalf of the public corporation. He/She is personally known to me or has produced \_\_\_\_\_ as identification.

  
Notary Public

Therese Howell Poitler  
Print

Print Commission Expires: 6/26/17



## MARINA MANAGEMENT PLAN

The proposed fueling facilities will consist of one (1) 100-gallon above ground storage tank with containment for gasoline and one (1) 100-gallon above ground storage tank with containment for diesel.

The staff of the marina will be trained to respond to site emergencies which could occur during the daily operation of the facility. They will be familiar with the types of liquids that will be stored on the site and will be prepared to deal with spills before they occur. Therefore, it will be necessary to prepare an inventory of all of the liquids on the site so everyone will know what they are; where they are; what their volumes are; and, the location of any fuel shut-off valves. This inventory will include Safety Data Sheets for each liquid on the site so employees can refer to them at the time of spills and the safe operation of the spill response kits.

An essential part of proper spill preparation is ensuring that the staff is trained in how to respond to spills and the use of the spill containment equipment. In order to insure that the staff is properly prepared it will necessary to conduct regular training on spill control best practices, safety tips and the use of spill kits. This will also include having "spill drills" in which the staff will respond to mock spill drills to test their preparedness, find weaknesses, and identify areas for improvement.

Routine site maintenance will prevent garbage from being disposed into wetlands and adjacent surface waters. There will be no fish cleaning stations on the site that are typically found at public marinas. Trash receptacles will be placed throughout the site and emptied on a regular basis. All garbage will be collected and placed in dumpsters on the site that will be serviced by a private waste management company for disposal at an approved landfill site.



## CONSULTING ENGINEERING & SCIENCE, INC.

Civil Engineers

Coastal Engineers

Environmental Scientists

August 11, 2016

Ms. Michelle Decker  
Broward County  
Environmental Protection and  
Growth Management Department  
1 North University Drive  
Plantation, Florida 3332

RE: Project USA, LLC  
Stirling Marina and Boat Sales  
ERL Application No. DF14-1226

Dear Ms. Decker:

This letter will certify that I am an engineer licensed in the State of Florida, qualified by education and experience in the area of engineering design and inspection, and that to the best of my knowledge and belief, the proposed work does not violate any laws, rules or regulations of the State of Florida or any provision of the Code of Broward County which may be applicable, that diligence and recognized standard practices of the engineering profession have been exercised in the engineer's design of the proposed work, and in my opinion based upon my knowledge and belief, the following will not occur:

- a. Harmful obstruction or undesirable alteration of the natural flow of the water within the area of the proposed work.
- b. Harmful or increased erosion, shoaling of channels or stagnant areas of water.
- c. Material injury to adjacent property.
- d. Adverse environmental impacts from changes in water quality or quantity.

Furthermore, I have not been previously informed by the reviewing agency that hydrographic information will be required.

Very truly yours,

CONSULTING ENGINEERING & SCIENCE, INC.

  
Richard B. Bochnovich, P.E.  
Senior Vice President  
P.E. No. 19833

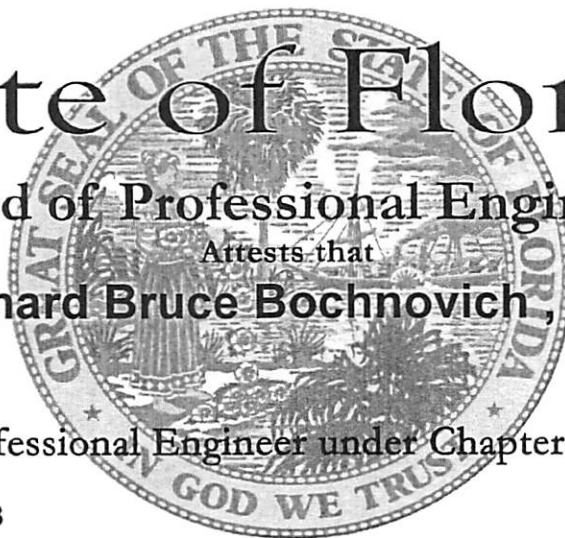
(14035)

# State of Florida

Board of Professional Engineers

Attests that

**Richard Bruce Bochnovich, P.E.**



**FBPE**  
FLORIDA BOARD OF  
PROFESSIONAL ENGINEERS

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2017

Audit No: 228201720543

P.E. Lic. No:

19833

**SECTION D: SUPPLEMENTAL INFORMATION FOR WORKS OR ACTIVITIES  
WITHIN SURFACE WATERS  
(OTHER THAN A SINGLE-FAMILY PROJECT)**

Instructions: This section is to be completed for projects that involve works (including breakwaters, jetties, shoreline protection structures, reefs, piers, docking facilities, bridges, causeways and other structures) or activities within surface waters that are not associated with a single-family residential property. This section is generally not required for such activities that are located entirely within non-navigable wetlands. This section must be used in conjunction with sections A and C. Activities that occur (or that may occur) on state-owned submerged lands will also require section F. Other sections may also be required, based on the scope of the proposed activities. All items required under this section are in addition to those required under other sections, as applicable.

**PART I: GENERAL PROJECT INFORMATION**

Please identify all proposed activities (select all that apply)

- Pier, dock, wharf, mooring field, marina, (including dry storage associated with a boat launch), boat ramp, ski course or other boating-related activity
- Breakwater, groin, jetty, shoreline stabilization structures, artificial reefs, intake or discharge structures, subaqueous utility lines or other submerged structures
- Bridge, causeway, culverted crossing, other traversing work or structure
- Dredging (for navigation channels, boat basins or other purposes) or filling in surface waters
- Any other structures, works or other in-water activities

**A. PIERS, DOCKS, BOAT RAMPS, MARINAS, MOORING FIELDS AND OTHER BOATING-RELATED ACTIVITIES**  Not applicable

1. Please provide a detailed description of the proposed activities and uses of the facility; include a description of the existing activities and uses, if applicable. *For example, "reconfigure existing 20-slip multifamily residential docking facility to create a 35-slip commercial marina with boat ramp, 4 temporary mooring areas and a fuel dock"*: Construct a twelve (12) slip marina and boat sales facility in the C-10 canal in Broward County.
2. Does the proposed facility, including existing structures and activities, consist *solely* of a pier, observation platform or other over-water structure that will not accommodate the mooring of vessels or any other boating-related activities?  
 Yes (Skip to question #8)  No
3. Please describe the types and the maximum size (length and draft), of vessels expected to use or proposed to be mooring at the facility.  
 The maximum length of vessels has been limited to 32 feet with a draft of 36 inches.
4. Please complete the table, below. *Information provided should concur with that provided on the plans/drawings:*



**US Army Corps  
of Engineers.**

TOTALS:	Existing	Proposed
Square Feet* over the water	0	2040
# of wet slips (permanent**)	0	12
# of wet slips (temporary***)	0	0
# of dry slips****	0	0

\* Total square footage of all structures (fixed or floating) over wetlands or surface waters

\*\* Slips and other areas designed for overnight or longer-term mooring

\*\*\* Short-term mooring areas, such as accessory docks, fuel docks, etc.

\*\*\*\* Includes upland boat storage, such as trailer parking spaces and dry storage racks

5. Is there is at least one foot of clearance at mean low water between the top of all submerged resources (such as seagrass beds, corals, etc.) or the submerged bottom (if such resources are absent) and the deepest draft of any vessels expected to use the proposed facility, along the route(s) of ingress/egress between the proposed facility and a marked navigational channel? *If vessels will not have this clearance, the applicant may be required to provide other assurances that the project will not cause adverse secondary, cumulative and/or water quality impacts.*

Yes, vessels will have at least 1' clearance at MLW     No/I'm not sure

6. Please specify whether the facility will provide:

Live-aboard slips:     Yes; Number:     No

Fueling facilities:     Yes; Number:     No

Sewage pump-outs:     Yes; Number:     No

Other boating-related supplies or services (e.g. boat maintenance or washdown areas, fish cleaning stations, etc.):     Yes; Describe:     No

7. Did you answer "yes" to any item in question #7, above?

Yes; please complete the items below     No; (Skip to question #8)

Please provide a facility management plan to address maintenance and unexpected spills of fuels or other pollutants. This plan should include, at a minimum, the following information, as applicable to the proposed project/activities:

- An education plan for all employees as it relates to fueling, sewage and gray water pump-out operations, waste management and facility maintenance;
- A spill response plan for fuel and oil that clearly identifies spill response procedures, responsible parties and emergency contact telephone numbers, and containment and cleanup equipment;
- Locations of fuel shut-off valves and (if floating docks are utilized) assurance that if floating docks separate, fuel lines will not continue to discharge fuel into surface waters;
- Plan for maintenance of gray water collection and return systems;

- Plan for maintenance of garbage and fish cleaning systems to prevent disposal into wetlands or other surface waters;

8. Please describe the design and type(s) of materials that will be used to construct the proposed facility (check all that apply):

Main pier/access walkways:  Piling-supported  Floating  Wharf/bulkhead

Finger piers (if applicable):  Piling-supported  Floating

Other Structures (please list and describe):

Pilings:  treated wood; type (e.g. CCA, ACQ, etc.), if known:

If pilings will be of treated wood materials, will they be completely wrapped (in sleeves of impermeable PVC, plastic or similar material) from at least one foot below the mud line to at least one foot above the mean high water line (or seasonal high water line in non-tidal waters)?  Yes  No

concrete/steel  plastic/composite  other

Decking:  wood  plastic/composite  grated  floating docks/other

**B. BREAKWATERS, JETTIES, GROINS, ARTIFICIAL REEFS, INTAKE OR DISCHARGE STRUCTURES, SUBAQUEOUS UTILITY LINES OR OTHER SUBMERGED STRUCTURES**  Not applicable

1. Please describe the nature and purpose of the proposed structure(s). *For example, "construct a 200-foot-long, 20 foot wide offshore breakwater to protect a restored living shoreline from waves and boat wakes from the nearby channel".*

2. Please describe the design and type(s) of structures that are proposed (check all that apply):

Breakwater (structures generally designed to attenuate wave energy and typically located entirely waterward of, and oriented parallel or oblique to the shoreline)

Jetty or groin (structures generally designed to alter longshore currents or sediment transport, and typically extending waterward from the shore at an angle perpendicular or oblique to the shoreline)

Seawall or revetment (hardened shoreline stabilization structure located along the shoreline)

Artificial reef, fish attractor or similar structure

Submerged intake, outfall, utility line or similar structure

Other; please describe:

3. Please provide a description of the existing erosional or depositional conditions of at the site, including amounts of natural and artificial shoreline, type(s) of vegetation, rates of erosion/deposition and supporting documentation, such as surveys, rectified aerials, or other photographs:

4. Please provide a detailed description of all proposed activities that includes, at a minimum, the following information, as applicable:
- Summary of the proposed construction materials, method(s) and equipment (including types and drafts of vessels that will be used)
  - Description of proposed turbidity control and monitoring method(s), and other best management practices
  - Description of any proposed measures for the protection of listed species and their habitats
5. Please describe how the project will be designed and constructed in a manner that will not cause adverse effects to navigation. Include the following, as applicable:
- Descriptions vessels (if any) customarily using the water body in the vicinity of the project, including representative types (e.g. sail, motor, etc.), sizes (length, width, draft) and use (e.g. recreational, commercial, military, etc.)
  - Scaled and dimensioned drawings or aerial photographs depicting the proposed structures or activities in relation to existing structures and navigation channels, or other documents that provide assurance that the project will not unreasonably infringe upon local navigation
  - The minimum navigation clearance, at mean low water for all proposed submerged structures
  - Proposed navigational safety features (advisory signs, lighting, etc.) for structures
  - If structures are proposed within 100 feet of any navigational channel or shipping fairway, provide an assessment of the navigational safety requirements or recommendations for the proposed project, from the U.S. Coast Guard, if available

**C. BRIDGE, CAUSEWAY, CULVERT, TRAVERSING WORK OR STRUCTURE**  Not applicable

1. Please describe the nature and purpose of the proposed structure(s), works or activities. *For example, "construct a 30-foot-wide, piling-supported bridge to support a 2-lane road".*
2. Will the proposed structure(s) support or accommodate motorized vehicular traffic?
- Yes       No (for pedestrian or non-motorized traffic, only)
3. Please describe the design and type(s) of structures that are proposed (check all that apply):
- free-spanning bridge (i.e. with no supporting structures in wetlands or surface waters)
  - piling-supported (or trestle) bridge
  - causeway
  - culverted crossing
  - other traversing work or structure; please describe:

Pilings/supports:

- Not applicable
- treated wood; type (e.g. CCA, ACQ, etc.), if known:
  - concrete/steel       other

If pilings will be of treated wood materials, will they be completely wrapped (in sleeves of impermeable PVC, plastic or similar material) from at least one foot below the mud line to at least one foot above the mean high water line (or seasonal high water line in non-tidal waters)?

- Yes       No

Surface:

- pavement (concrete or asphalt)  grated  wood  other

If the roadway will support motorized vehicular traffic, please provide a detailed description of how stormwater and other potential sources of runoff and pollution will be managed. Include supporting calculations, figures or other documents, prepared by a Florida-registered professional, if applicable:  Not applicable

Fill and design:

- Earthen fill; please describe type, specifications, and source (if known):
- Riprap or other armored revetment; please describe type, specifications, and source (if known) of proposed materials:
- Vegetated shoreline; please describe species, sizes, planting spacing (on-center) and elevations (relative to mean or ordinary high and low water), application methods and source (if known), as applicable, of all proposed plants, sod or seed:

Culverts:

- Box  round/elliptical  other
- Please describe, in detail, the number, type and dimensions of all proposed culverts:

Other works or structures:

- Please describe, in detail, the purpose, design and dimensions of all other proposed traversing work or structures:

4. Please provide a detailed description of the proposed construction activities that includes, at a minimum, the following information, as applicable:
- Summary of the proposed construction method(s) and equipment, including types of vessels or vehicles
  - A detailed plan for all proposed turbidity control and monitoring method(s), at all dredging or filling locations, and at proposed spoil offloading, disposal or dewatering locations
  - Description of any proposed measures for the protection of listed species and their habitats, including statements of whether all work will be limited exclusively daylight hours
  - For causeways, culverts and traversing works, a description of construction methods and sequencing that ensures that construction of the proposed project will not impound waters, cause flooding, or cause adverse impacts to wetlands or surface waters, including surface water flows or levels
5. Please describe how the project will be designed and constructed to avoid adverse effects to navigation. Include the following, as applicable:
- Descriptions of representative types of vessels (if any) customarily using the water body in the vicinity of the project, including
  - Scaled and dimensioned drawings or aerial photographs depicting the proposed structures or activities in relation to existing structures and navigation channels, or other documents that provide assurance that the project will not unreasonably infringe upon local navigation
  - The minimum navigational clearance beneath the proposed structure(s), at mean (or ordinary) high water

- The minimum navigation clearance, at mean low water for all proposed submerged structures (if applicable)
- If within 100 feet of a federally maintained or regulated navigational channel or shipping fairway, an assessment of the navigational safety requirements or recommendations (advisory signs, lighting, etc.) for the proposed project, from the U.S. Coast Guard

**D. DREDGING (FOR NAVIGATION BASINS, CHANNELS OR OTHER PURPOSES) AND/OR FILLING**

- Not applicable

1. Please describe the nature and purpose of the proposed dredging or filling activities. *For example, "dredge a 1,000 foot long, 50 foot wide navigation channel to a depth of six feet mean low water, to serve a commercial marina":* Construct a twelve (12) slip marina and boat sales facility in the C-10 canal in Broward County.

2. Please provide a detailed description of all proposed dredging and filing activities that includes, at a minimum, the following information, as applicable:

- Summary of the proposed dredging and filling method(s) (e.g. clamshell, hydraulic, etc.) and equipment, including types of vessels The dredge material will be removed with a crane and bucket from a barge. The material will be placed in large containers on the barge which will be transported to an approved landfill for disposal.
- A detailed plan for all proposed turbidity control and monitoring method(s), at all dredging or filling locations, and at proposed spoil offloading, disposal or dewatering locations Turbidity curtains will be installed at all work areas.
- Description of any proposed measures for the protection of listed species and their habitats, including statements of whether all work will be limited exclusively daylight hours

All construction personnel will be familiar and comply with the standard manatee conditions for in-water work including the sea turtle and smalltooth sawfish construction conditions.

3. Please describe how the project will be designed and constructed to avoid adverse effects to navigation. Include the following, as applicable:

- Descriptions of representative types of vessels (if any) customarily using the water body in the vicinity of the project, including
- Scaled and dimensioned drawings or aerial photographs depicting the proposed structures or activities in relation to existing structures and navigation channels, or other documents that provide assurance that the project will not unreasonably infringe upon local navigation
- A description of construction methods and sequencing that ensures that the proposed project will not obstruct local navigation during construction All in-water work will maintain half of the waterway width open for local boat traffic which is minimal due to low level bridges.
- If within 100 feet of a federally maintained or regulated navigational channel or shipping fairway, an assessment of the navigational safety requirements or recommendations (advisory signs, lighting, etc.) for the proposed project, from the U.S. Coast Guard
- For projects that include in-water filling of submerged lands, the minimum navigation clearance, at mean low water for all proposed fill areas (if applicable)

4. For dredging projects, please describe how dredged spoil material will be managed and disposed. *For more information regarding dredged material management areas, refer to the "ERP Review for Dredged Material Management Areas" design aid in the Applicant's Handbook, Volume II.* At a minimum, this description should include:

- Grain size distribution and silt/clay content percentage of the material proposed to be dredged; (the reviewing agency may require additional sediment testing, based upon the percentage of silt/clay sediments)
- Proposed dredging, pumping, and outfall design, including turbidity containment, pipe fluidity requirements, and outfall placement and design The dredge material will be removed with a crane and bucket from a barge. The material will be placed in large containers on the barge which will be transported to an approved landfill for disposal.
- Calculations regarding the spoil area volume requirements including bulking factors, surface overflow rate, settling times, freeboard, etc.

- Description of how spoil material will be ultimately disposed of, including proposed stabilization methods The dredge material will be removed with a crane and bucket from a barge. The material will be placed in large containers on the barge which will be transported to an approved landfill for disposal.
- If flocculents, coagulants, or other additives are proposed (to aid with dewatering or settling), provide the names, descriptions, Material Safety Data Sheets, proposed application rates, and ecotoxicity data and testing methods for all such additives

**PART II: HYDROGRAPHIC INFORMATION**

*The following information is necessary to determine whether the proposed activities may cause or contribute to a violation of state water quality standards. This information is required for activities or facilities that may either add pollutants to, or result in an adverse change to the patterns of flow, circulation, erosion, deposition or littoral transport of a waterbody. Additional information, including water and/or sediment testing data, may be required, based on the hydrographic information. Please complete and provide all items as appropriate for your proposed project, unless you have been directed otherwise by the reviewing Agency during a pre-application meeting. Failure to do so may delay the processing of your application.*

1. I certify that, (check as appropriate for your project):

- I have been informed by the reviewing agency, during a pre-application meeting or conference, that hydrographic information will not be required for my project;

Date and location of pre-application meeting or conference:

- My project consists solely of the modification, construction or operation of a docking facility that will accommodate the mooring of fewer than 10 vessels, including dry storage, when associated with a boat ramp or launch, **AND I have not been previously informed by the reviewing agency that hydrographic information will be required**
- I am submitting a certification from a Florida-registered professional clearly stating that, due to the design, nature and/or location of the proposed structures, works or other activities, that the project does not have the potential to add pollutants to, or result in an adverse change to the patterns of flow, circulation, erosion, deposition or littoral transport of a waterbody; **AND I have not been previously informed by the reviewing agency that hydrographic information will be required.**  
*A copy of the Florida-registered professional's certification must be included with this application.*  
We have attached a letter from a Florida-registered professional stating that the project does not have the potential to add pollutants to, or result in an adverse change in the patterns of flow, circulation, erosion, deposition or littoral transport of a waterbody.
- None of the above; please provide all applicable items listed below, based on the specific works or activities proposed for construction, alteration, maintenance, abandonment or removal, as part of your project.

2. All structures or works

- Existing water body bathymetry and shoreline topography, if applicable
- Structural details for the proposed structure(s)
- Sediment grain size distribution and silt/clay content percentage within project area and adjacent areas
- For activities in tidal waters, mean high and low water elevations, range and periodicity

3. Piers, docks, wharves, marinas, mooring fields and other boating-related activities (refer to Applicant's Handbook, Volume I, s. 10.2.4)  Not applicable

- Details of existing and proposed systems including all dimensions (length, width, depth), location of junctions, connections to open waters, and dead-end(s), if applicable.
- Site-specific characteristics of the wind field
- For tidal systems, provide the longest path length, phase lag and the flow amplitude (at mid-tide) between the head or center of the system to open waters
- For non-tidal systems, provide the water surface elevation difference between the head (or center) and mouth of the system, and provide representative flow conditions at selected locations
- Estimate the time needed to reduce the concentration of a hypothetical conservative pollutant, placed at the head of the system, to ten percent (10%) of initial
- Verify (e.g. by using a tracer dye) the model(s) used to determine the advective/dispersive characteristics of the system. Provide a concentration gradient map depicting the size, distance of travel, and time of dispersion to the 10% concentration isopleth

4. Breakwaters, groins, jetties, seawalls, revetments,  Not applicable

- Monthly averaged wave height, direction and period for the project area shoreline
- Wind data (direction and velocity) for project area
- Estimate the mean annual and mean monthly littoral drift direction and volume
- Existing structures within the zone of influence of proposed structures
- Existing shoreline topography – dune crest to offshore bar break
- Estimated changes in littoral transport, erosion and deposition rates and patterns due to the proposed structures

5. Bridges, causeways, culverts  Not applicable

- For tidal waters, the maximum, minimum, and mean flow volumes and amplitudes, at ebb and flood tide
- For non-tidal waters, the maximum, minimum, and mean flow volume and amplitude and mean range and periodicity of the water level variation
- Existing circulation patterns in the waterway at the location of the proposed structure
- Culvert or channel dimensions, cross-sectional area, and invert elevations
- Maximum design discharge, and change in flow due to change in culvert or channel cross-section, if applicable
- Drainage basin map and backwater calculations for area served by culvert, if applicable
- Existing and proposed flow cross-sections and volumes at high and low water, for specified storm (flood) events, if applicable

6. Basins, channels, residential canals and canal networks  Not applicable

- Maximum and mean tidal flow rates for ebb and flood along the channel
- Baseline bathymetry for the existing channel and adjacent areas
- Detailed descriptions of all areas of erosion and deposition, including existing deeps that can result in debris traps and zones of stratified water

7. Outfalls and intakes  Not applicable

- Design maximum and normal operational flows for the outfall/intake, and criteria used
- Dimensions and invert elevations for the proposed structures
- Details of the construction at the shoreline/waterline intercept

### **PART III: PLANS**

*Provide plan and section view drawings that clearly show the facility, structure or other works to be constructed, as applicable for the proposed project. Drawings be signed and sealed by a Florida-registered professional, and must be of a scale sufficient to show the location and dimensions of all works. Use multiple sheets, if necessary. This information is in addition to that required under Section C (and others, if applicable) of the Joint Application.*

#### **1. All structures**

Plan-view drawings should include the following, as applicable to the proposed activity:

- The location and orientation of all corresponding section, profile and detail drawings
- Location of the riparian upland parcel or property boundary lines, if applicable
- Mean high water line (MHWL), ordinary high water line (OHWL), or safe upland line (SUL)
- Complete dimensions (length, width, height) of all structures, works or other activities in, on, or over wetlands or surface waters, including existing structures within 100 feet of the proposed facility
- Separate and label square footage of structure over wetlands, open water and uplands
- Existing and proposed water depths throughout project area – isobaths or spot elevations must be clearly labeled with depths depicted in relation to mean low water (MLW), controlled water elevation (in non-tidal waters where the water is fairly controlled), mean annual low water (in other non-tidal waters), or an established vertical datum
- Show proposed turbidity, erosion and sedimentation control locations

Section- and profile-view drawings should include the following, as applicable to the proposed activity:

- Complete dimensions of all proposed structures, including elevation above mean high water or ordinary high water (as applicable)
- Water depth at mooring sites (mean low water, ordinary low water, or seasonal low water)
- In tidal areas – approximate tidal range

#### **2. Piers, docks, marinas, boat ramps and other docking or boating-related facilities** Not applicable

Plan-view drawings should include the following, as applicable to the proposed activity:

- Show and label width of deck planks and plank spacing, or if grated decking is to be used, provide technical specifications
- Show the locations of all proposed sewage pumpouts, fuel pumps and spill cleanup equipment
- Show the locations of all proposed informational signage (manatee awareness, fueling safety, etc.)
- Number each slip
- Width of waterway and the location of the navigation channel and water depths (in relation to MLW) and distance along the most direct route(s) between the facility and the nearest marked navigational channel(s)

Section- and profile-view drawings should include the following, as applicable to the proposed activity:

- Elevation of the structure above MHWL (tidal waters) or OHWL (non-tidal waters), and water depth at mooring sites and the bottom of the boat ramp (if applicable)
- Structural details of all proposed pilings, anchors, moorings, buoys and similar structures

3. Basins, channels, and other dredging and/or filling works or activities  Not applicable

Plan-view drawings should include the following:

- The location, boundaries and water depths (in relation to MLW) of all nearby navigation channels
- The locations and detail drawings of all proposed navigational safety markers (signs, lights, etc.) for the structure(s)
- The location, dimensions and engineering specifications (including BMPs) for all proposed dredged material offloading, management and disposal sites, if applicable

Section- and profile-view drawings should include the following, as applicable to the proposed activity:

- Representative section and/or profile views of all proposed structures that clearly show the existing and proposed depths, widths and side slopes of all dredge and fill areas in relation to MHWL and MLWL (tidal waters), OHWL (non-tidal waters), and the submerged bottom, at representative locations

4. Groins, jetties, seawalls, revetments, artificial reefs  Not applicable

Plan-view drawings should include the following:

- The location and water depths (in relation to MLW) of all nearby navigation channels
- The locations and detail drawings of all proposed navigational safety markers (signs, lights, etc.) for the structure(s)

Section- and profile-view drawings should include the following, as applicable to the proposed activity:

- Representative section and/or profile views of all proposed structures that clearly show the height, width and side slopes of each structure in relation to MHWL and MLWL (tidal waters), OHWL (non-tidal waters), and the submerged bottom, at representative locations

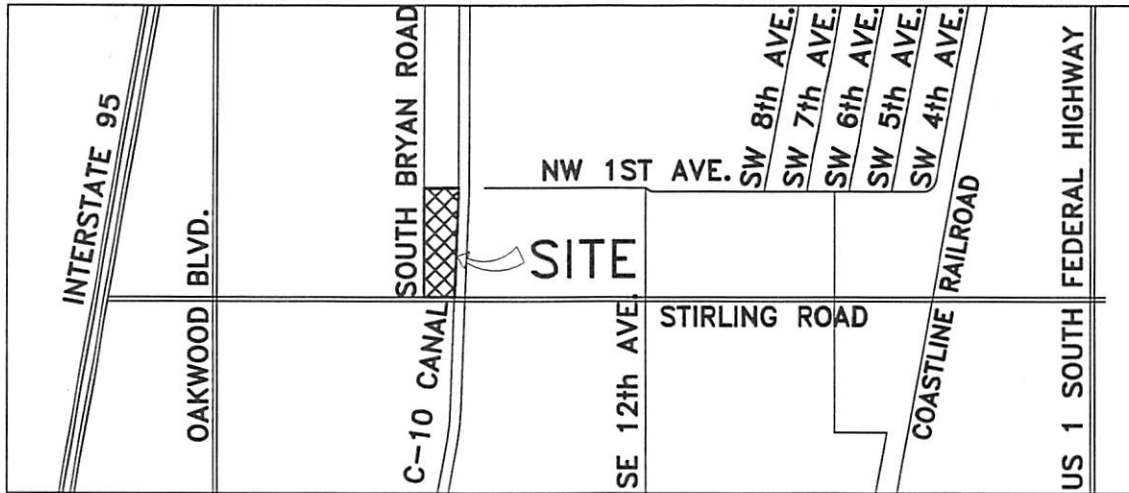
5. Bridges, causeways, culverted crossings, other traversing works or structures  Not applicable

Plan-view drawings should include the following, as applicable to the proposed activity:

- Width of waterway and the location, orientation and water depths (in relation to MLW) of the navigation channel (if applicable)
- Dimensions and technical specifications of the road, decking or other surface, including drainage features, if applicable

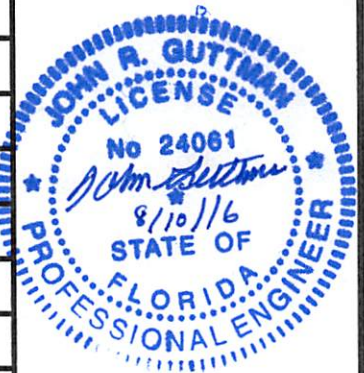
Section- and profile-view drawings should include the following, as applicable to the proposed activity:

- Elevation of the structure above MHWL (tidal waters) or OHWL (non-tidal waters)
- Representative sections through the culvert or channel



VICINITY MAP

INDEX OF DRAWINGS	
SHT. No.	TITLE
1	VICINITY MAP & INDEX OF DRAWINGS
2	EXISTING SITE SURVEY
3	EXISTING CANAL PROFILES
4	PROPOSED SITE PLAN
5	SLIP LAYOUT PLAN
6	PROPOSED R-O-W ACQUISITION
7	PROPOSED SEAWALL PLAN
8	SEAWALL SECTION
9	PROPOSED WOOD DOCK & PIER PLAN
10	WOOD DOCK & PIER SECTION
11	PROPOSED CONCRETE DOCK PLAN
12	CONCRETE DOCK SECTION
13	PROPOSED DREDGING PLAN
14	DREDGING SECTIONS
15	DREDGING SECTIONS
16	RIP-RAP PLANS & SECTIONS
17	BOAT LAUNCH RAMP PLAN & SECTION

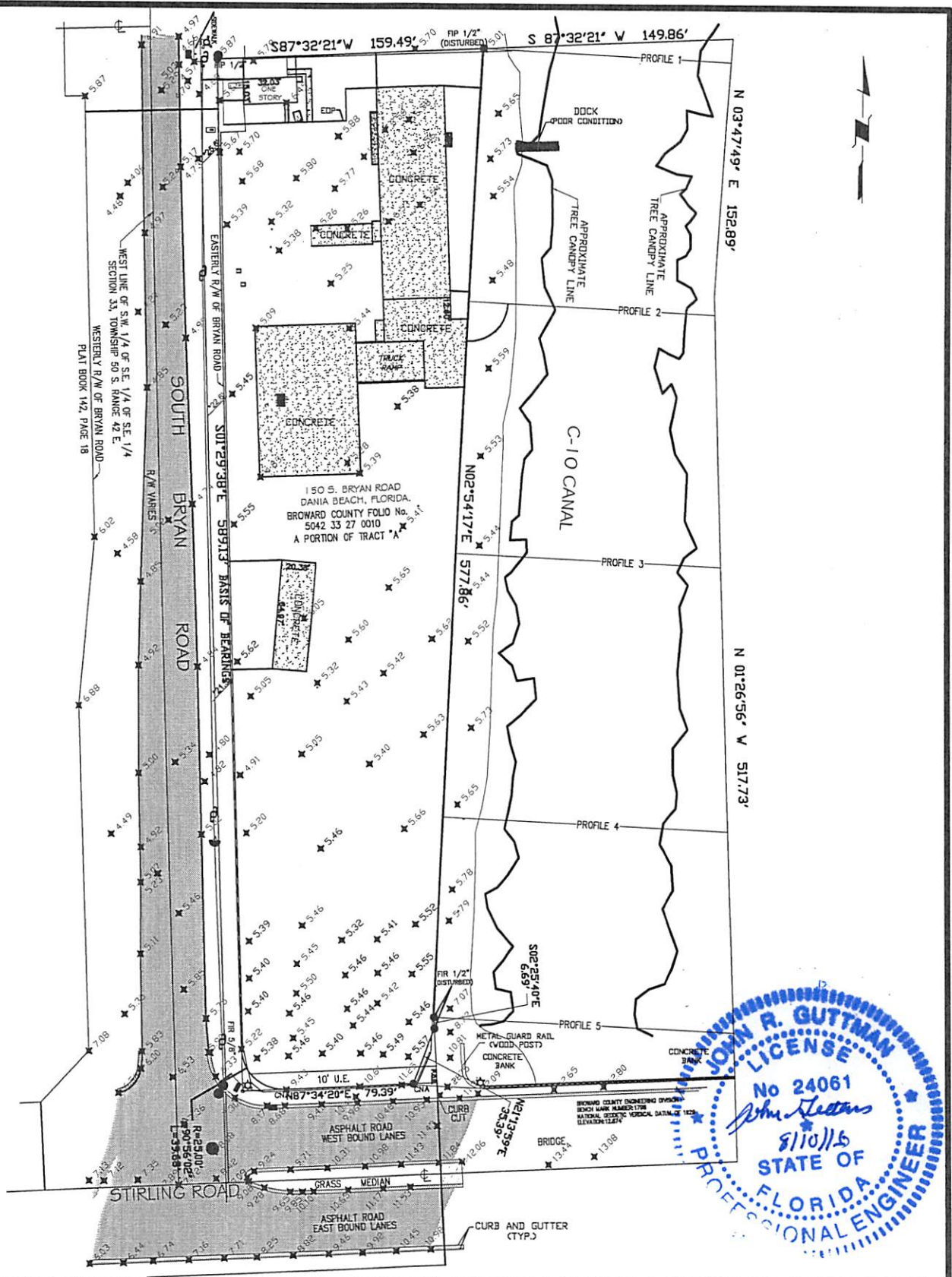


PURPOSE: VICINITY MAP &  
INDEX OF DRAWINGS

DATUM: N.G.V.D.  
PREPARED BY:  
Consulting Engineering & Science, Inc.  
10700 N. Kendall Drive, Suite 400  
Miami, Florida 33176

COUNTY OF BROWARD, STATE OF FLORIDA  
APPLICATION BY:

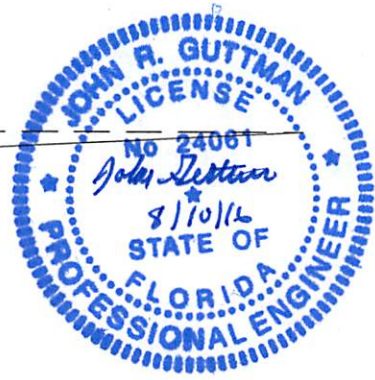
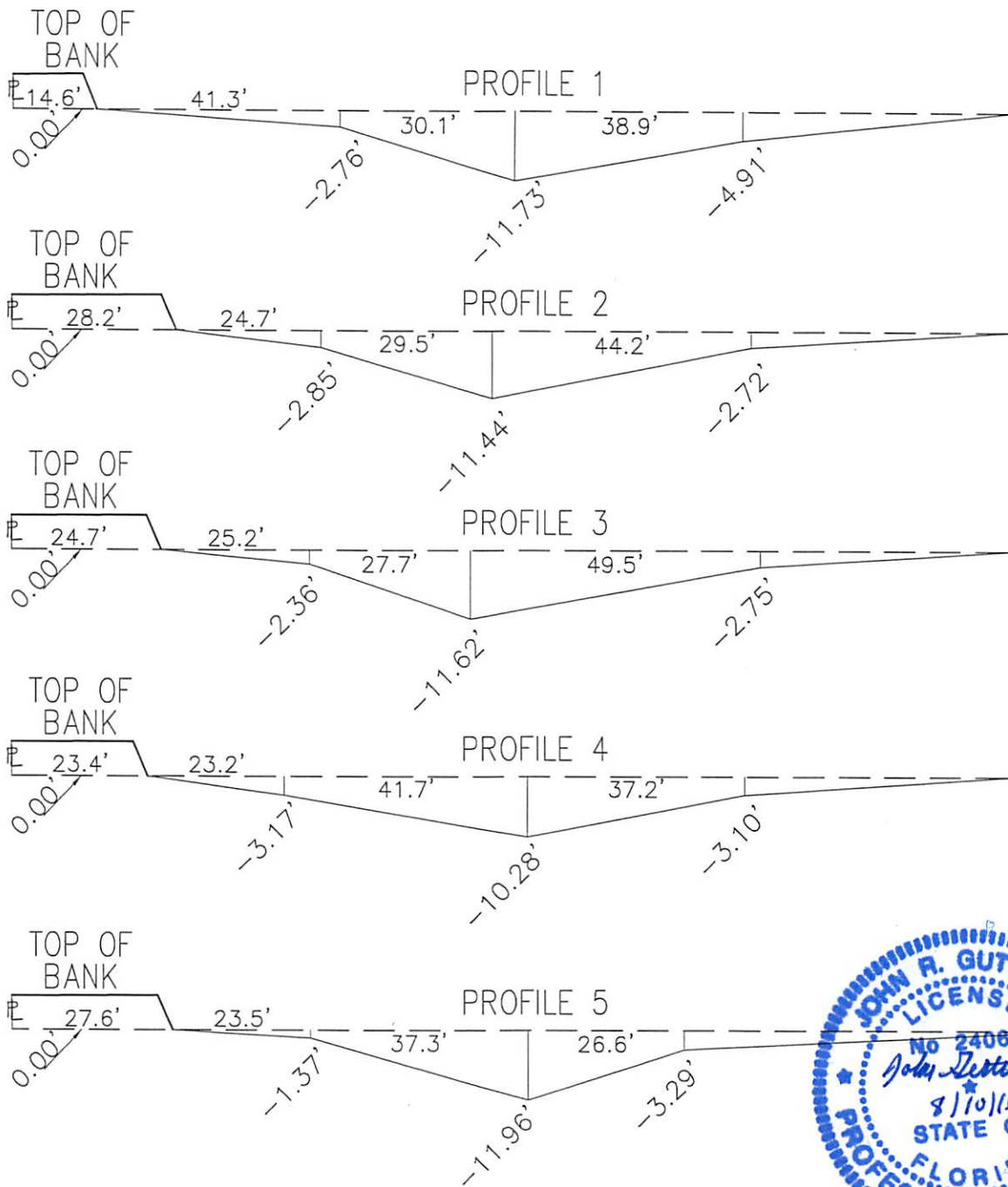
Stirling Marina & Boat Sales  
150 South Bryan Road  
Dania Beach, Florida 33004



PURPOSE: EXISTING SITE SURVEY

DATUM: N.G.V.D.  
 PREPARED BY:  
 Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176

COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:  
 Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004

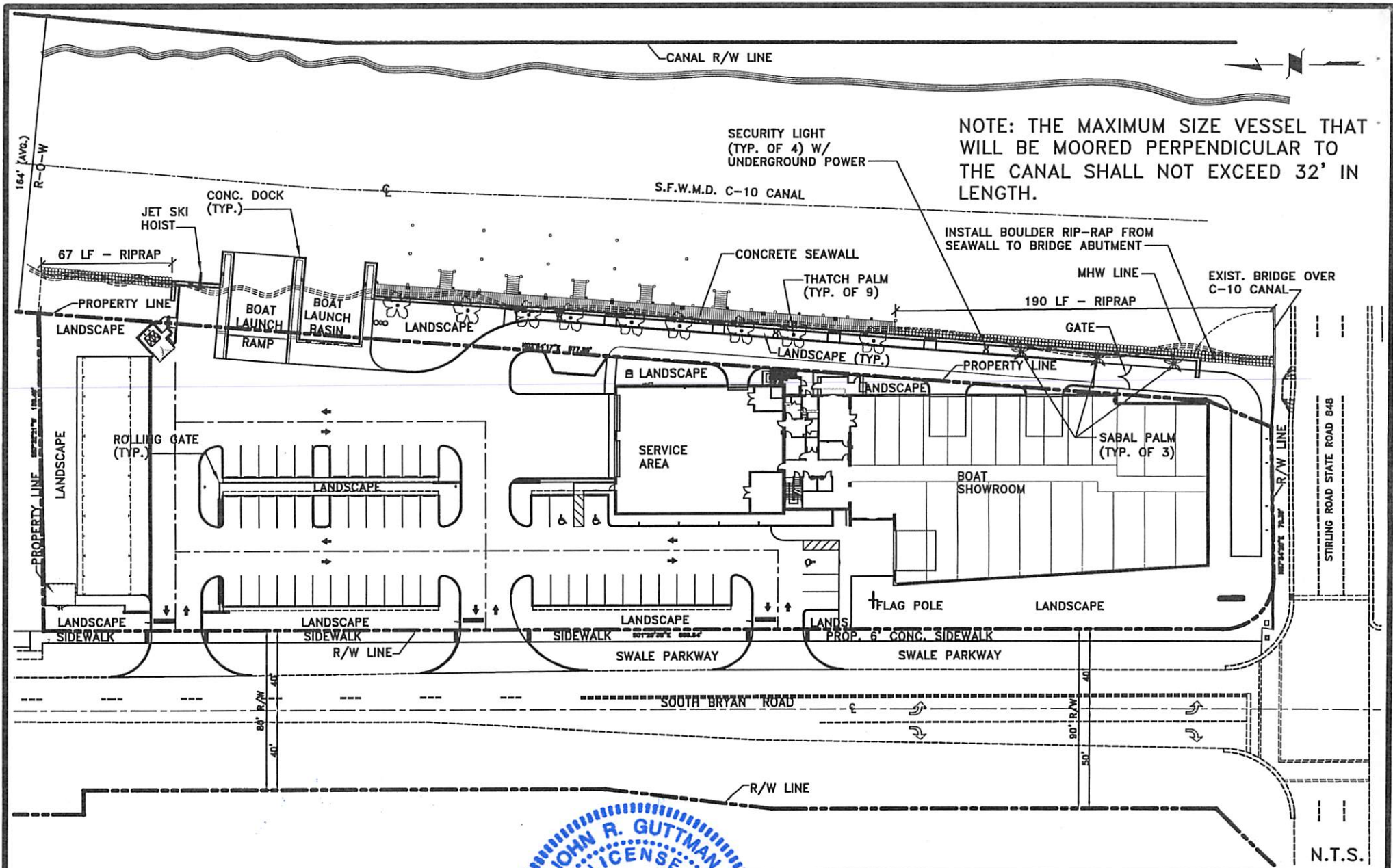


PURPOSE: EXISTING CANAL PROFILES

COUNTY OF BROWARD, STATE OF FLORIDA

DATUM: N.G.V.D.  
 PREPARED BY:  
 Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176

Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004



NOTE: THE MAXIMUM SIZE VESSEL THAT WILL BE MOORED PERPENDICULAR TO THE CANAL SHALL NOT EXCEED 32' IN LENGTH.



PURPOSE: PROPOSED SITE PLAN

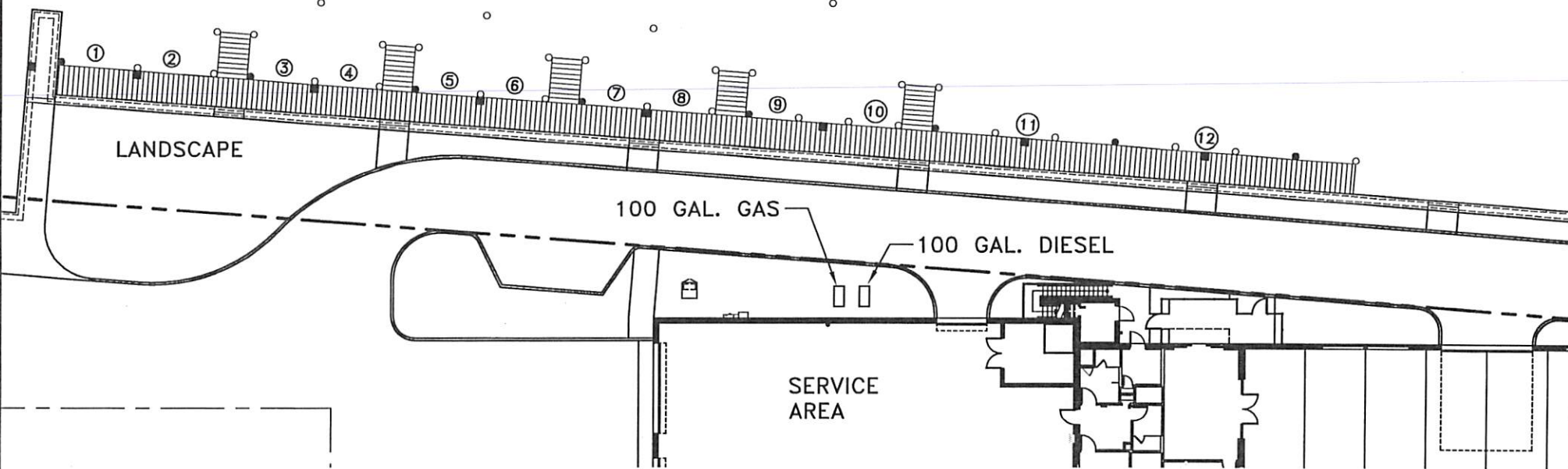
DATUM: N.G.V.D.  
 PREPARED BY:  
 Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176

COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:  
 Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004

N.T.S.



S.F.W.M.D. C-10 CANAL



N.T.S.

PURPOSE: SLIP LAYOUT PLAN

DATUM: N.G.V.D.  
 PREPARED BY:  
 Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176



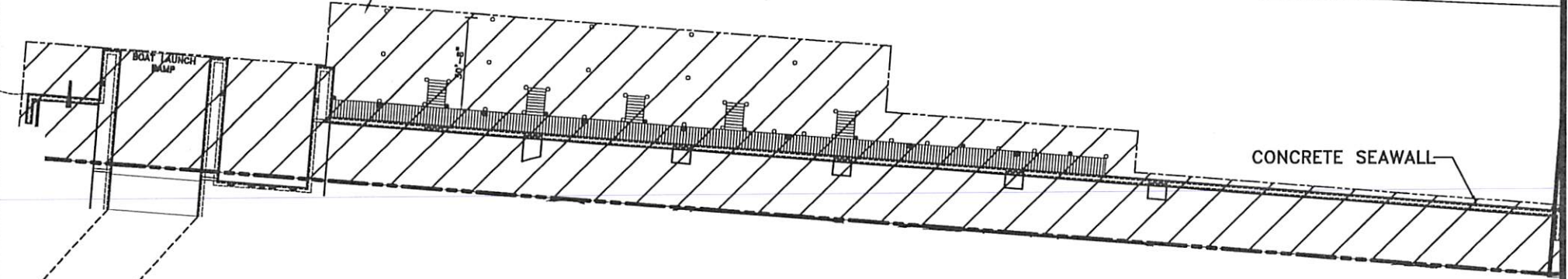
COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:  
 Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004

SHEET 5 OF 17 DATE: 08-09-16



CANAL R-O-W AREA TO BE ACQUIRED FROM SFWMD

S.F.W.M.D. C-10 CANAL



SFWMD CANAL ACCESS EASEMENT

NOTE:

1. THE MAXIMUM SIZE VESSEL THAT WILL BE MOORED PERPENDICULAR TO THE CANAL SHALL NOT EXCEED 32' IN LENGTH.

2. NO VESSELS SHALL BE MOORED SOUTH OF THE PROPOSED WOOD DOCKS.

NOTE:

TOTAL LENGTH OF WOOD DOCK AS SHOWN ON THIS SHEET = 305'

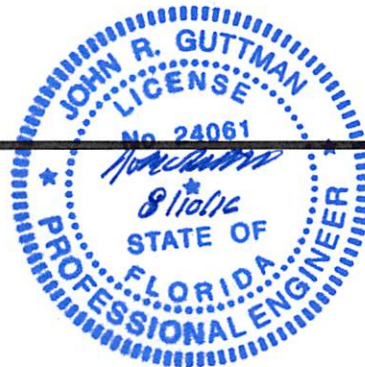
N.T.S.

PURPOSE: PROPOSED R-O-W ACQUISITION

DATUM: N.G.V.D.

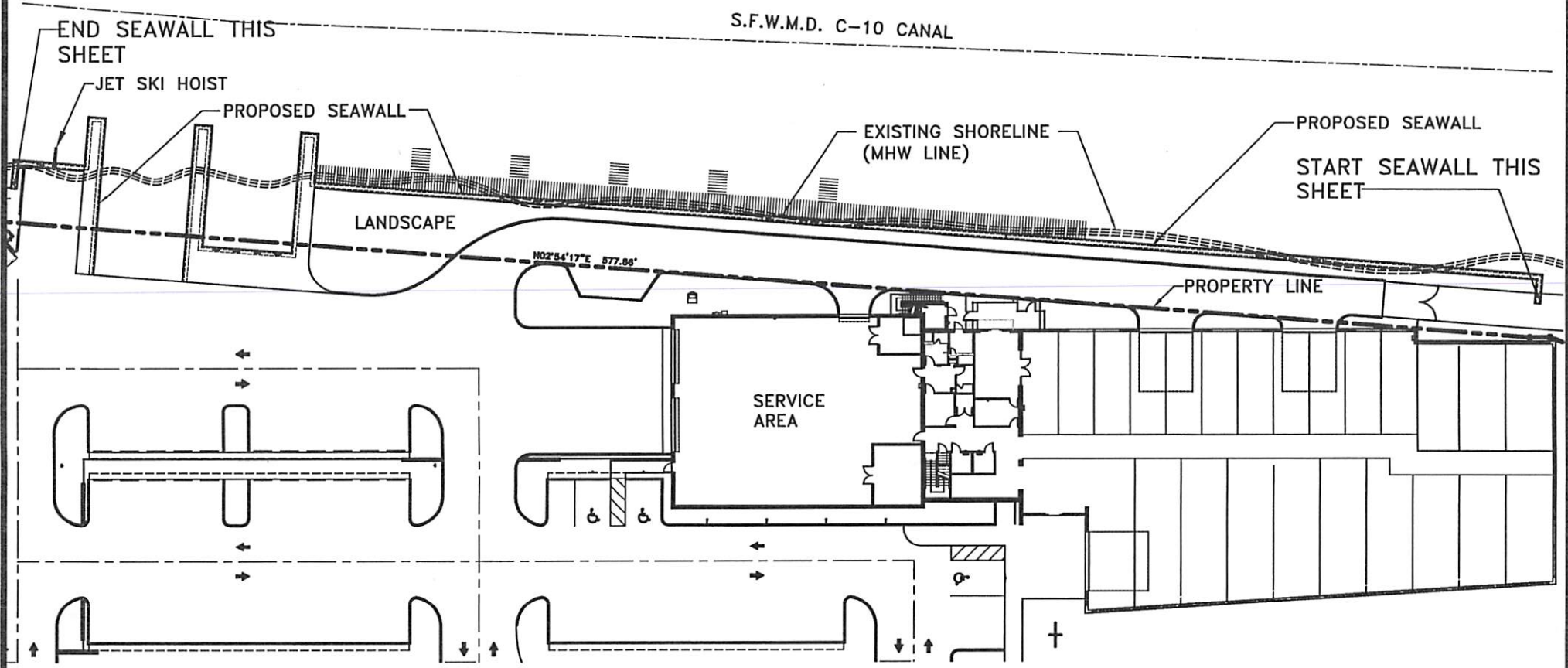
PREPARED BY:

Consulting Engineering & Science, Inc.  
10700 N. Kendall Drive, Suite 400  
Miami, Florida 33176



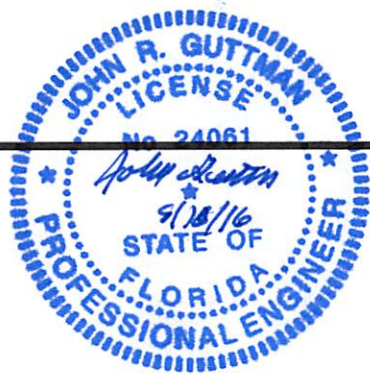
COUNTY OF BROWARD, STATE OF FLORIDA  
APPLICATION BY:

Stirling Marina & Boat Sales  
150 South Bryan Road  
Dania Beach, Florida 33004



NOTE:  
 TOTAL LENGTH OF CONCRETE SEAWALL  
 AS SHOWN ON THIS SHEET = 727'

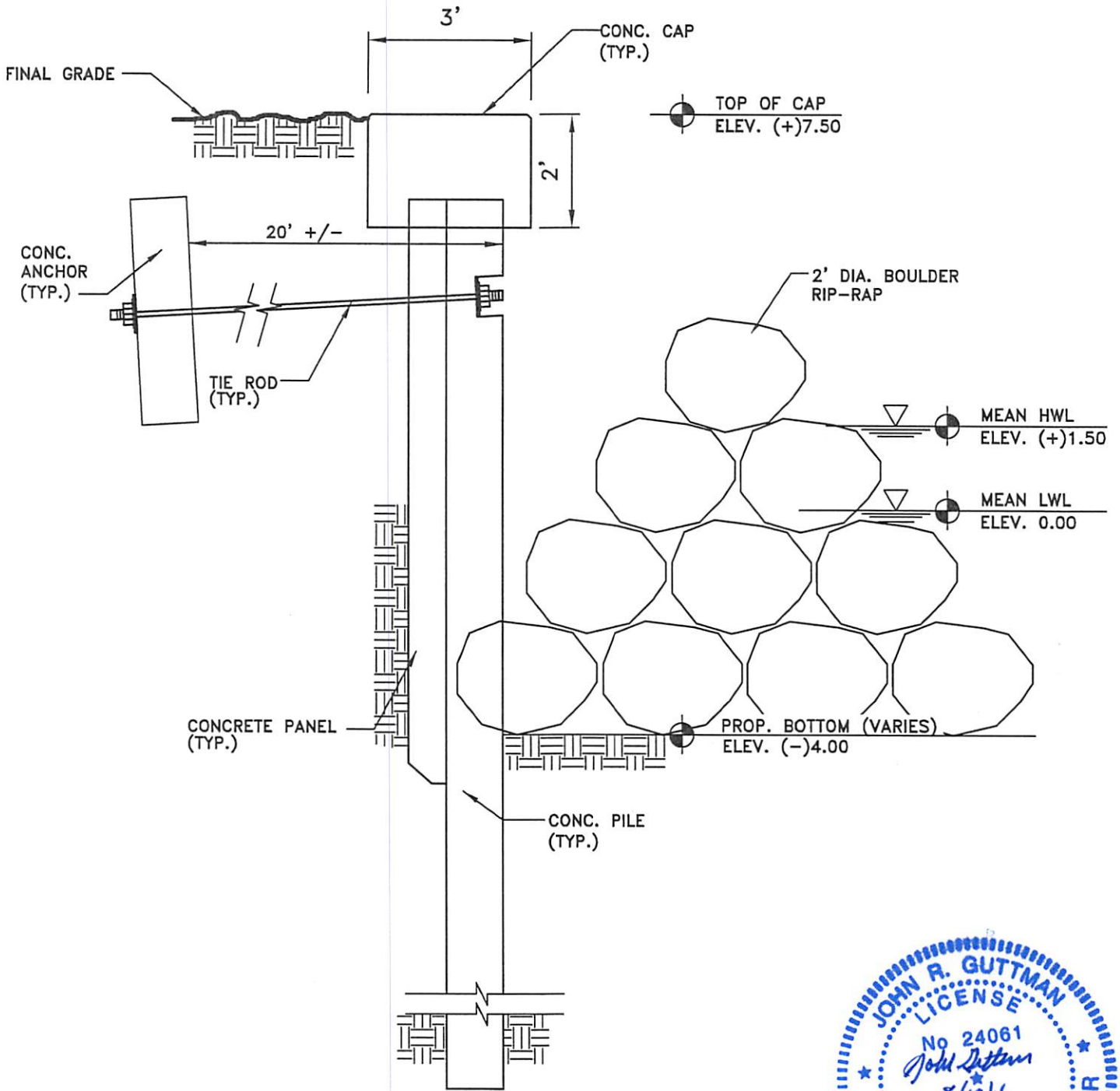
N.T.S.



PURPOSE: PROPOSED SEAWALL PLAN

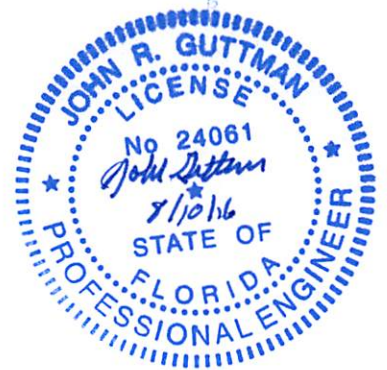
DATUM: N.G.V.D.  
 PREPARED BY:  
 Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176

COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:  
 Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004



**SECTION**

N.T.S.



PURPOSE: SEAWALL SECTION

DATUM: N.G.V.D.

PREPARED BY:

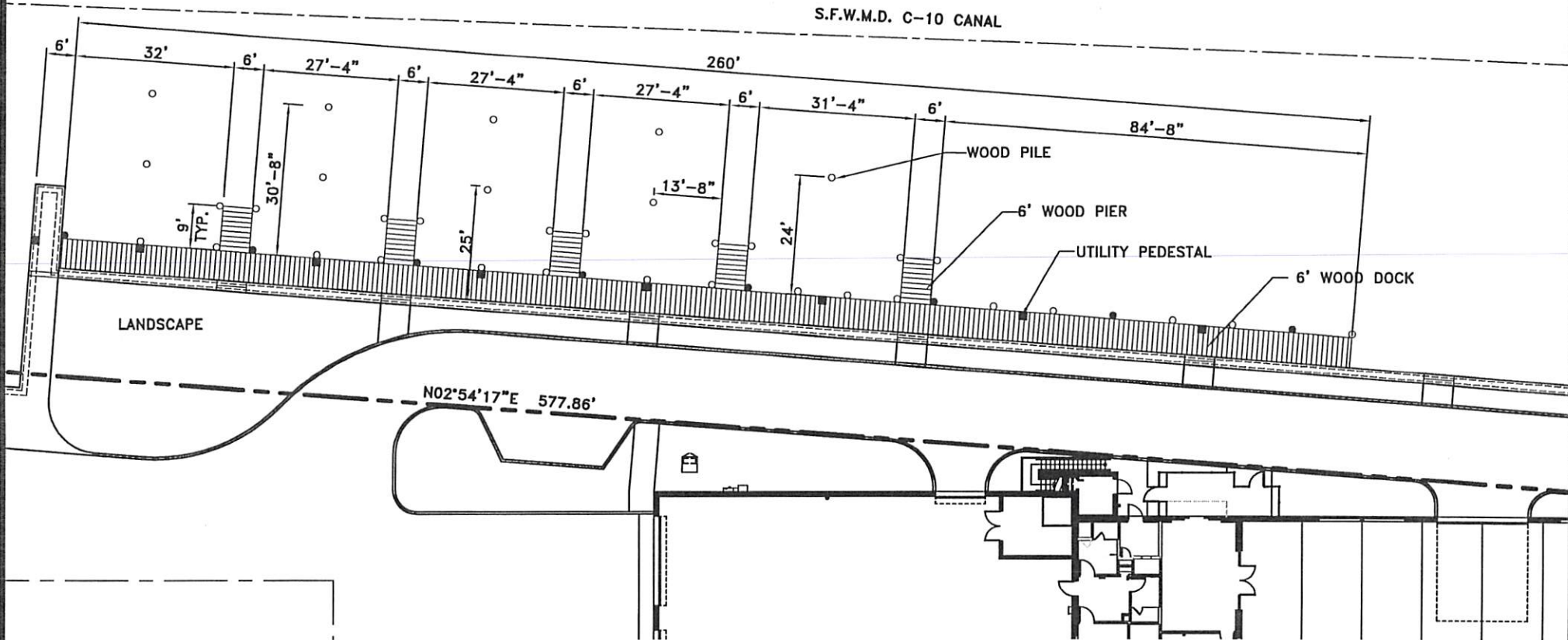
Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176

COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:

Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004



S.F.W.M.D. C-10 CANAL



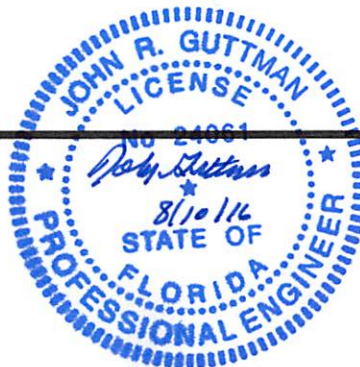
NOTE: THE MAXIMUM SIZE VESSEL THAT WILL BE MOORED PERPENDICULAR TO THE CANAL SHALL NOT EXCEED 32' IN LENGTH.

NOTE: TOTAL LENGTH OF WOOD DOCK AS SHOWN ON THIS SHEET = 305'

N.T.S.

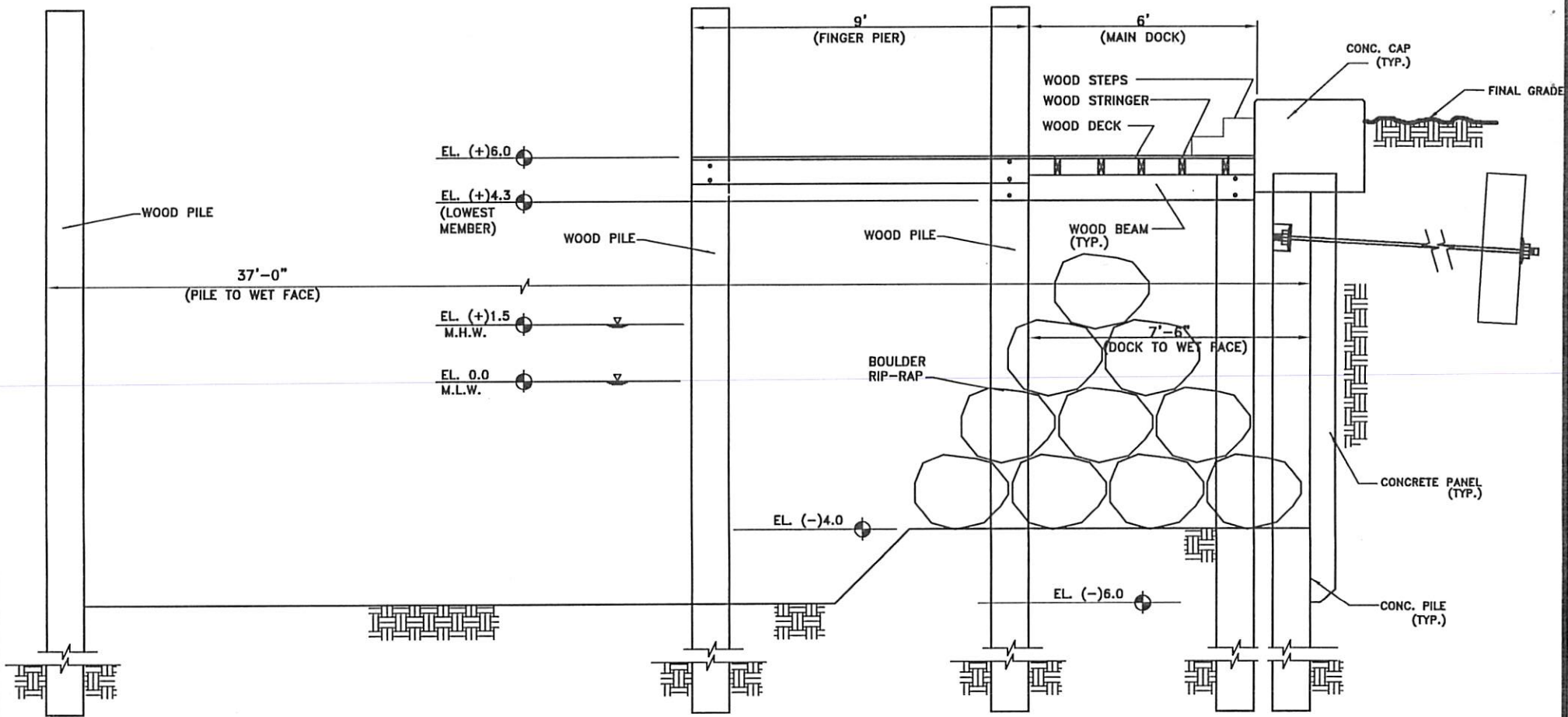
PURPOSE: PROPOSED WOOD DOCK & PIER PLAN

DATUM: N.G.V.D.  
 PREPARED BY:  
 Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176



COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:  
 Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004

SHEET 9 OF 17 DATE: 11-05-15

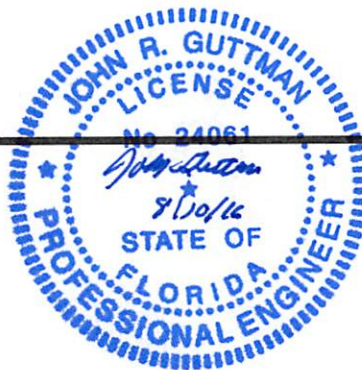


NOTE: THE MAXIMUM SIZE VESSEL THAT WILL BE MOORED PERPENDICULAR TO THE CANAL SHALL NOT EXCEED 32' IN LENGTH.

N.T.S.

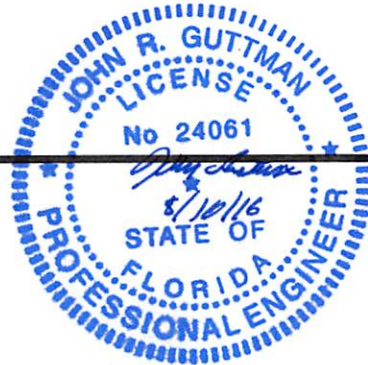
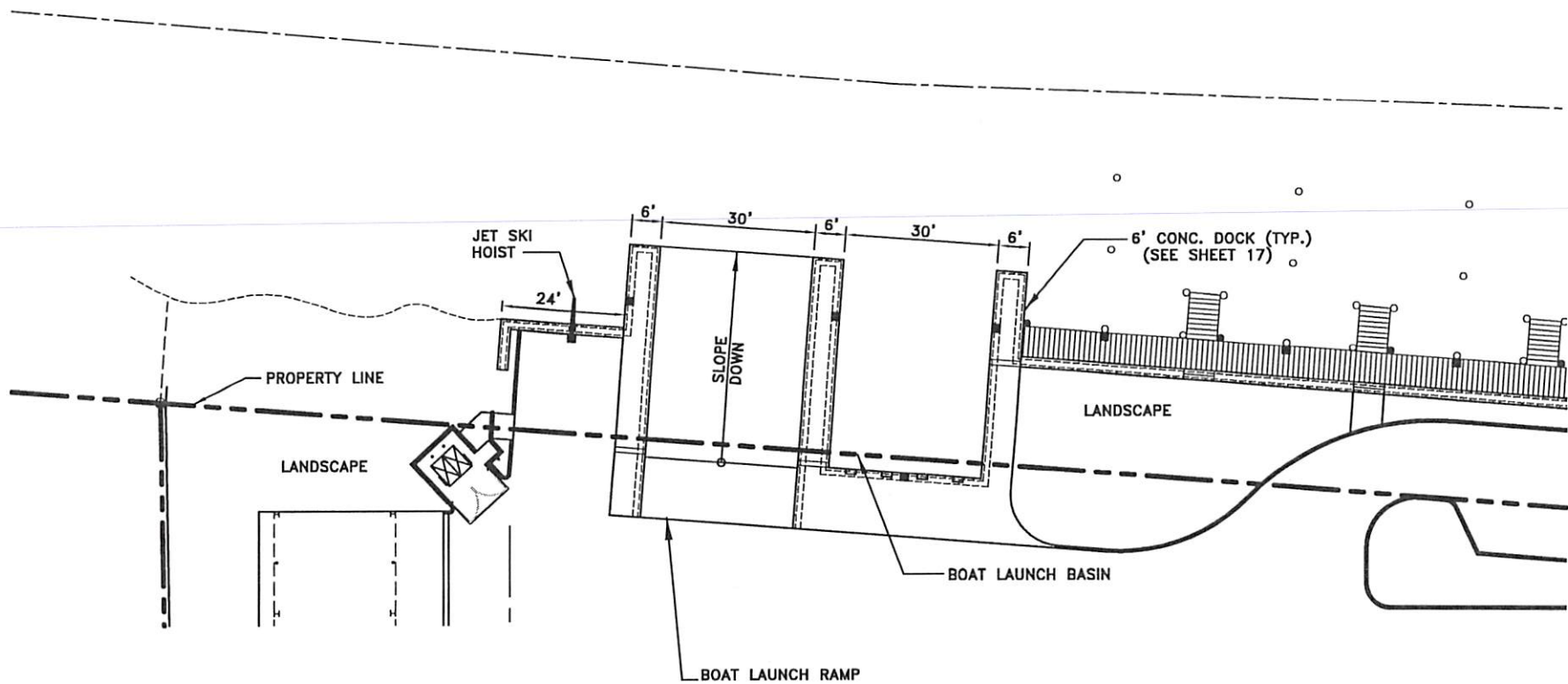
PURPOSE: WOOD DOCK & PIER SECTION

DATUM: N.G.V.D.  
 PREPARED BY:  
 Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176



COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:  
 Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004

SHEET 10 OF 17 DATE: 08-09-16



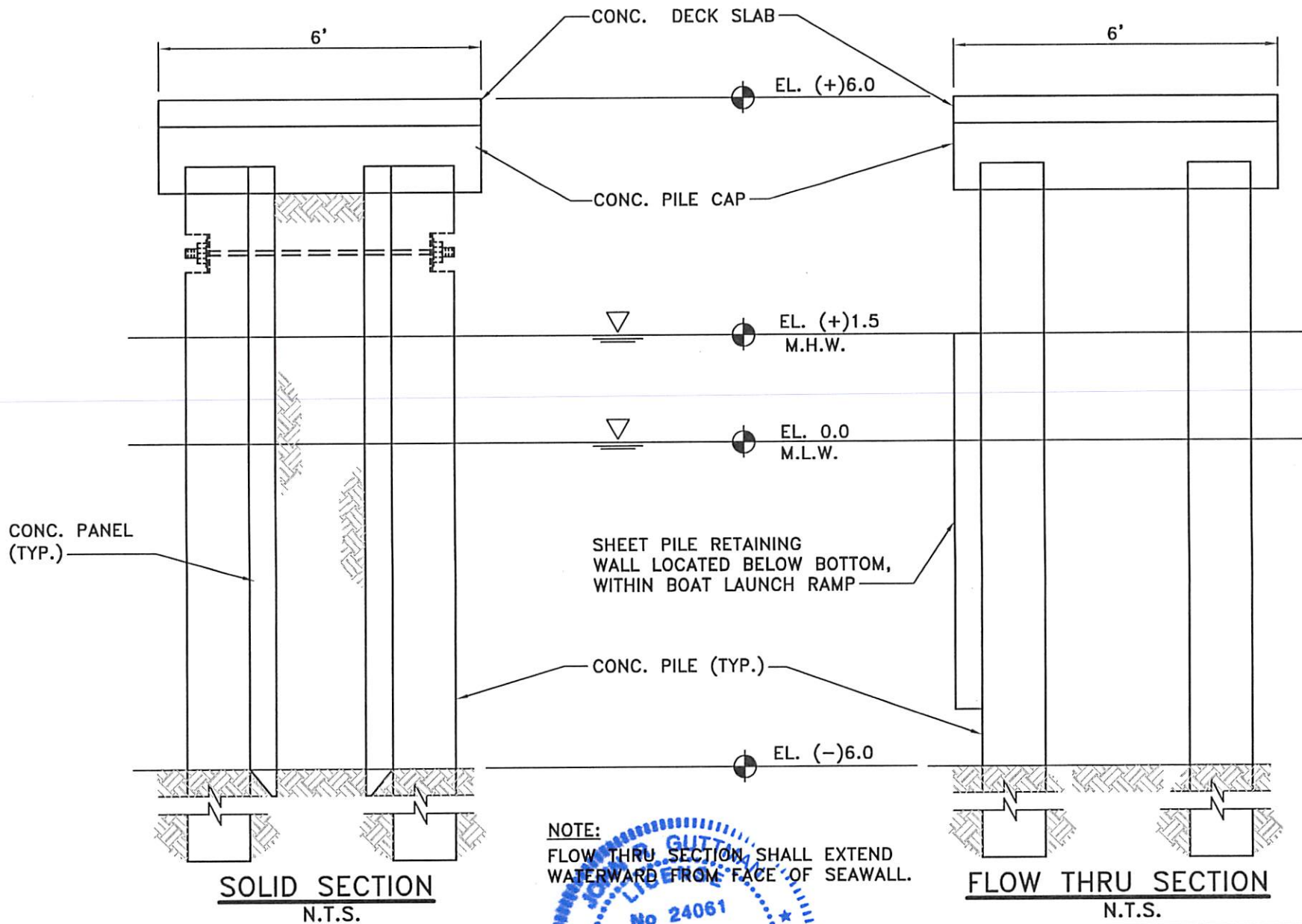
N.T.S.

PURPOSE: PROPOSED CONCRETE DOCK PLAN

DATUM: N.G.V.D.  
 PREPARED BY:  
 Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176

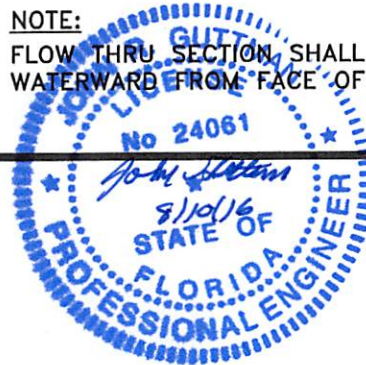
COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:  
 Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004

SHEET 11 OF 17 DATE: 12-8-15

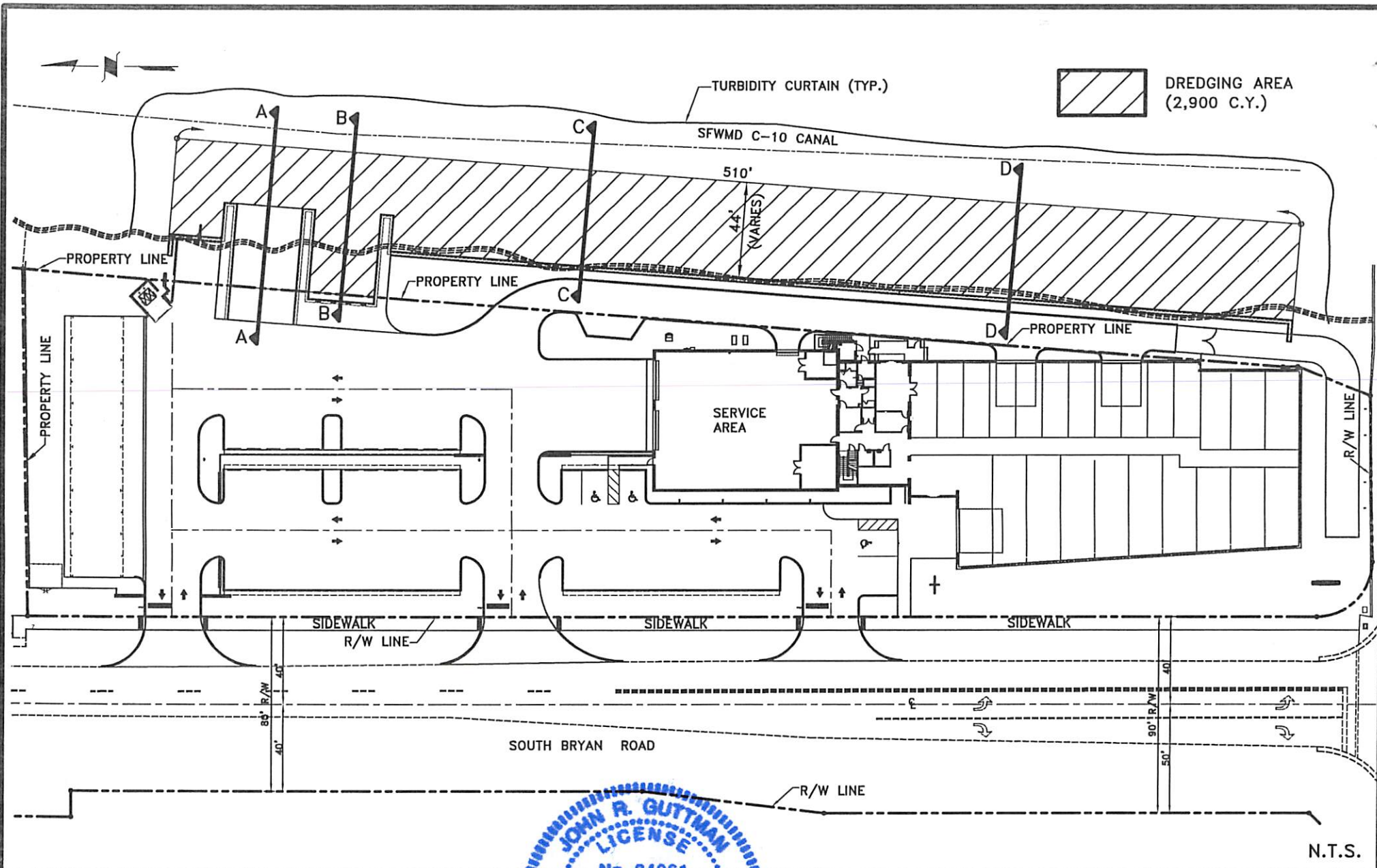


PURPOSE: CONCRETE DOCK SECTION

DATUM: N.G.V.D.  
 PREPARED BY:  
 Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176



COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:  
 Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004



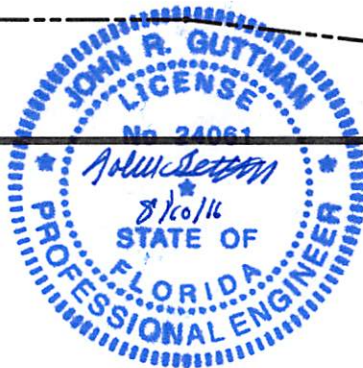
N.T.S.

PURPOSE: PROPOSED DREDGING PLAN

DATUM: N.G.V.D.

PREPARED BY:

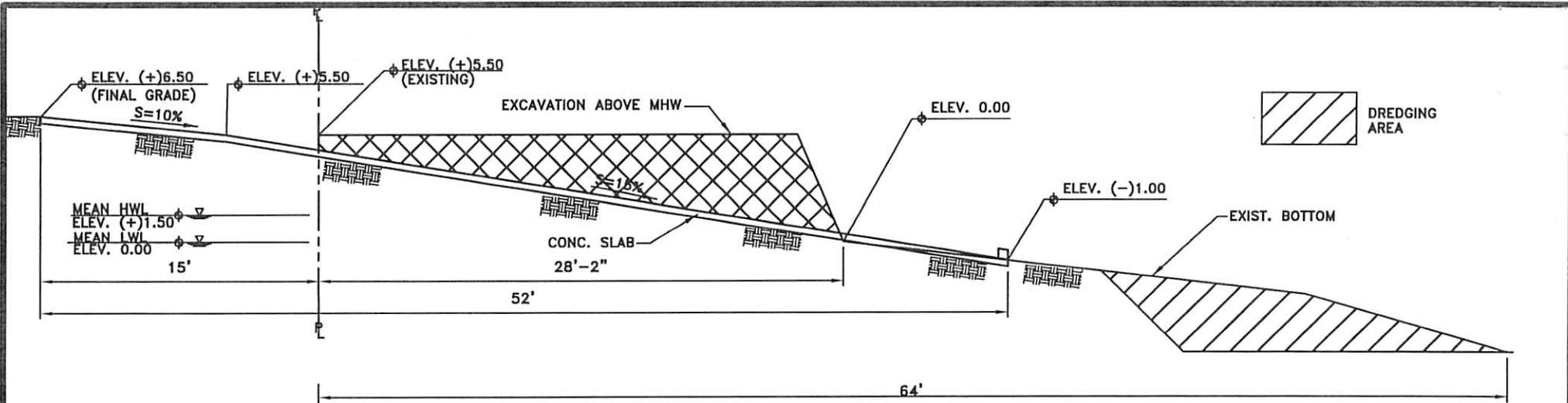
Consulting Engineering & Science, Inc.  
 10700 N. Kendall Drive, Suite 400  
 Miami, Florida 33176



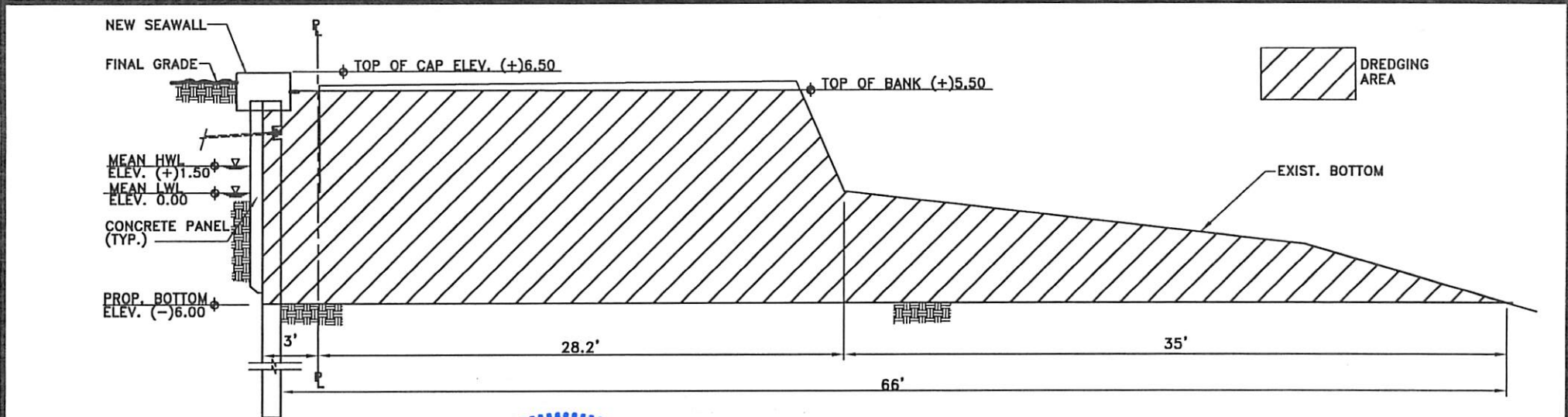
COUNTY OF BROWARD, STATE OF FLORIDA  
 APPLICATION BY:

Stirling Marina & Boat Sales  
 150 South Bryan Road  
 Dania Beach, Florida 33004

SHEET 13 OF 17 DATE: 08-09-16



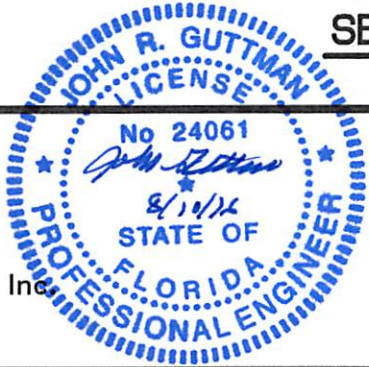
**SECTION A-A**  
N.T.S.



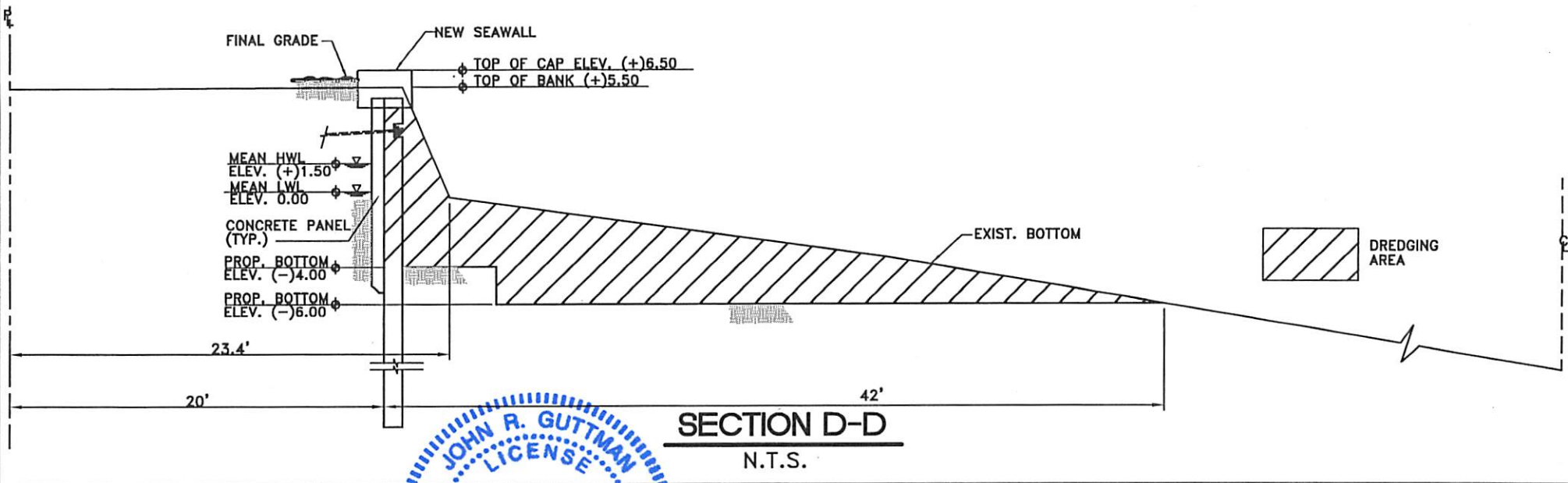
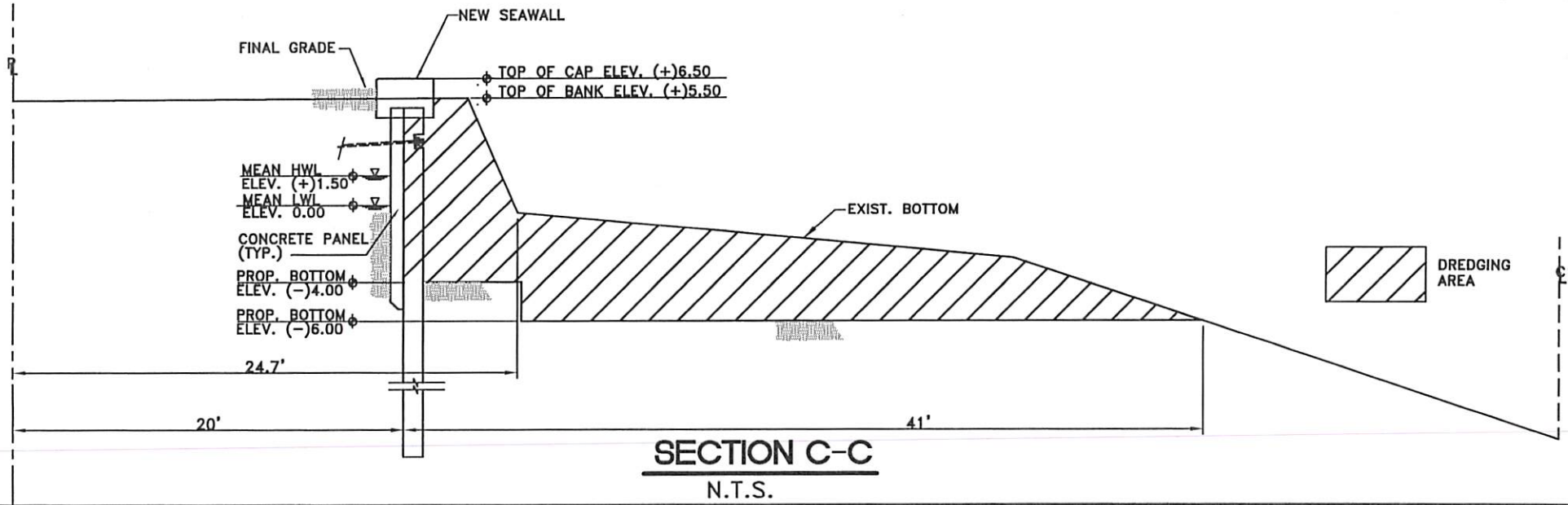
**SECTION B-B**  
N.T.S.

PURPOSE: DREDGING SECTIONS

DATUM: N.G.V.D.  
PREPARED BY:  
Consulting Engineering & Science, Inc  
10700 N. Kendall Drive, Suite 400  
Miami, Florida 33176



COUNTY OF BROWARD, STATE OF FLORIDA  
APPLICATION BY:  
Stirling Marina & Boat Sales  
150 South Bryan Road  
Dania Beach, Florida 33004

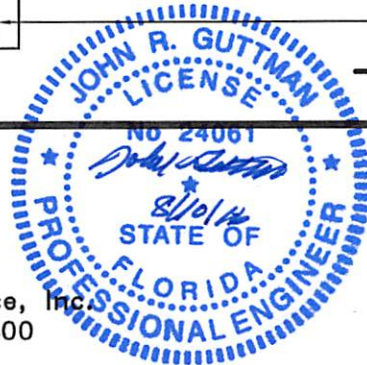


PURPOSE: DREDGING SECTIONS

DATUM: N.G.V.D.

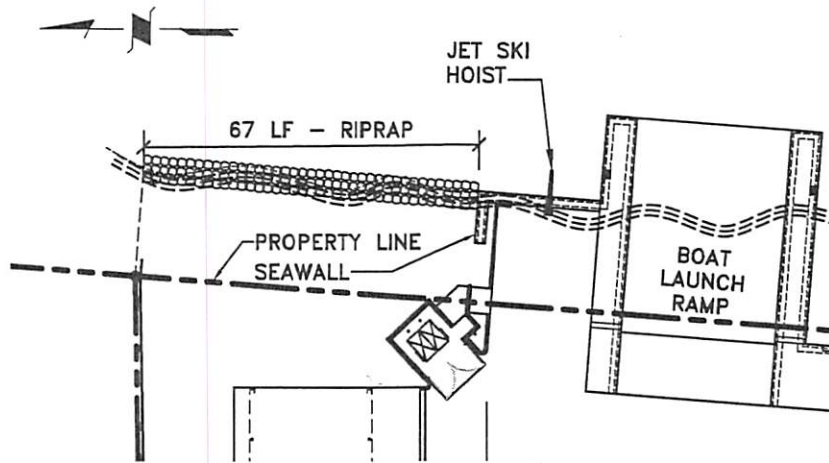
PREPARED BY:

Consulting Engineering & Science, Inc.  
10700 N. Kendall Drive, Suite 400  
Miami, Florida 33176



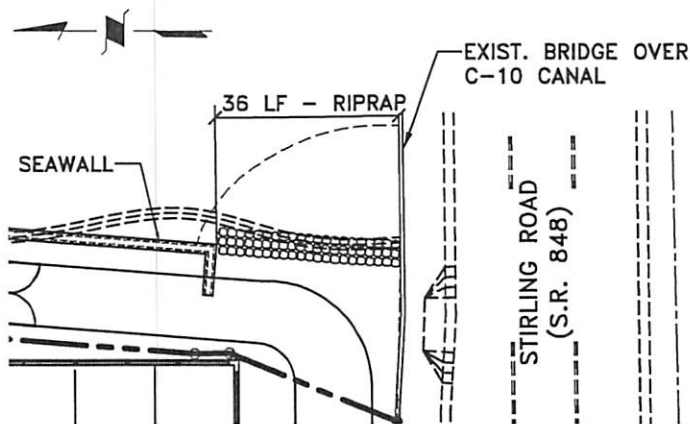
COUNTY OF BROWARD, STATE OF FLORIDA  
APPLICATION BY:

Stirling Marina & Boat Sales  
150 South Bryan Road  
Dania Beach, Florida 33004



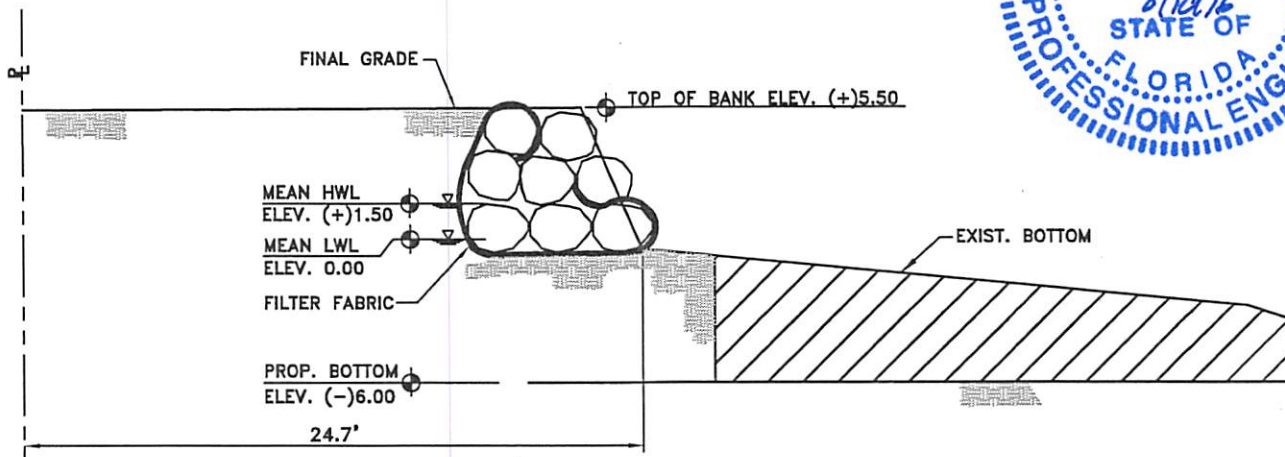
**NORTH RIP-RAP PLAN**

N.T.S.



**SOUTH RIP-RAP PLAN**

N.T.S.



**RIP-RAP SECTION**

N.T.S.

PURPOSE: RIP-RAP PLANS & SECTIONS

COUNTY OF BROWARD, STATE OF FLORIDA

DATUM: N.G.V.D.

PREPARED BY:

Consulting Engineering & Science, Inc.  
10700 N. Kendall Drive, Suite 400  
Miami, Florida 33176

Stirling Marina & Boat Sales  
150 South Bryan Road  
Dania Beach, Florida 33004

