



City of Sanibel

Planning Commission

COMMUNITY SERVICES DEPARTMENT Planning Staff Report

Planning Commission Meeting:
Planning Commission Agenda Item:
Application Numbers:
Applicant:

September 14, 2021

No #7a.

21-12890V

SteMic Marine Construction, on behalf of
James + Deborah Fowler, Property
Owners

RE: Consideration of an application filed pursuant to Land Development Code Section 82-138, Application and hearing, for a **Variance** to Land Development Code Chapter 126, Article XIV, Division 2, Subdivision II – Accessory Marine Structures, Section 126-875 Waterward Extension, to allow for a the construction of a new boat dock and boat lift to exceed the maximum permitted waterward extension limit (i.e., more than the maximum allowed 20 percent width of the waterway) as measured from the approximate mean high water line of the abutting human-made canal, accessory to a vacant residential parcel of land located at 5821 Pine Tree Drive (Lots 8B + 9B, Castaway Estates Unrecorded Subdivision – tax parcel No. 11-46-21-T3-00900.008B). The application is submitted by SteMic Marine Construction on behalf of property owners James A. + Deborah N. Fowler.
Application No. 21-12890V.

ISSUES

In considering the subject variance application the following issues should be addressed:

1. Does the requested variance meet all seven standards listed in Section 82-140 of the *Sanibel Land Development Code*?
2. If the variance is approved, what additional conditions, if any, should be placed on the development?

PROPOSAL

The applicant proposes to remove an existing boat dock and construct a new boat dock and boat lift on a vacant residential parcel of land abutting a human-made Castaway Estates neighborhood canal at 5821 Pine Tree Drive.

A copy of the variance application and the applicant's responses to the seven standards are provided as **Attachment A**. A location map and site aerial photography is included as **Attachment B**. A survey of the subject property is provided as **Attachment C**. The existing dock layout is provided as **Attachment D**. The proposed dock and lift plans are provided as **Attachment E**. A memorandum from the Natural Resources Department, dated September 2, 2021 is provided as **Attachment F**.

Existing Site Conditions

The vacant subject property (see **Attachment C**) is approximately 20,425 square feet in net lot area and is situated on the southern side of Pine Tree Drive. Located on the northern side of a private Castaway Estates canal, the property has approximately 191 feet of heavily vegetated shoreline. An existing T-shaped boat dock permitted in 1991 is present approximately 40 feet from the eastern side property line (see **Attachment D**). The immediately adjacent properties both contain existing boat docks while the vacant property directly across the canal has a boat dock and lift. The adjacent human-made canal ranges from approximately 82 to 84 feet in width measured between both respective mean high water lines.

Proposed Site Conditions

The applicant proposes to demolish the existing boat dock and construct a new boat dock with finger pier and a boat lift. The proposed plans (**Attachment E**) depict the dock and boat lift location and the placement within the same relative footprint as the existing dock. The plan shows a 4-foot x 17-foot access walkway leading to a 4-foot x 40-foot terminal dock platform. An 11-foot x 12-foot boat lift is proposed adjacent to the western end of the terminal platform and situated so that a vessel would moor parallel to the shoreline.

Due to the extensive mangrove vegetation along the shoreline (visible on page 3 of **Attachment B**), the landward edge of the proposed terminal platform must be located approximately 9 to 10 feet waterward of the mean high water line. The 4-foot wide terminal platform with attached boat lift are proposed to extend approximately 26 feet beyond the mean high water line. Land Development Code Section 126-875, Waterward extension, provides that no marine structure (including mooring pilings) shall extend waterward more than 20 percent of the width of the waterway. The subject canal is 84 feet wide at the location of the proposed boat lift, for a maximum waterward extension of 16.8 feet.

As shown on **Attachment E**, the proposed dock and lift will extend approximately 9 feet beyond the maximum permitted. To accommodate the proposed dock and boat lift, **the applicant requests a variance to the maximum permitted waterward extension - to extend an additional 9 feet beyond the 20 percent limit, for a total waterward extension of 26 feet.**

Aside from the requested variance, the proposed dock and lift meet all other accessory marine structure standards of the Land Development Code, including maximum dock area (200 sq. ft. proposed vs. 320 sq. ft. allowed), side setbacks (27 feet proposed vs. 15 feet required), and maximum dock width (4 feet proposed vs. 8 feet allowed). Although not located equidistant from side property lines, the proposed dock conforms to enhanced side property line setbacks required by the Sanibel Code for structures not located equidistant from both side property lines.

A vessel secured in the proposed boat lift would not extend across any extended side property lines and would extend the same distance into the canal as a vessel moored at the existing boat dock.

Natural Resources Department Staff conducted a site inspection (see **Attachment F**) to evaluate the natural resource-related impacts of the subject variance application and commented that the subject human-made canal contains no seagrasses, oysters, or other protected marine organisms in the proposed dock and lift area. The applicant's list of anticipated mangrove impacts was reviewed and there were no recommended revisions to the proposed plans to preserve mangroves. It is noteworthy that the existing dock is currently unusable due to the existing mangrove vegetation, and the proposed plans represent no more impact to mangroves than what is required to utilize the existing dock. Natural Resources does not have any objection to the proposed variance.

ANALYSIS

The Planning Commission may approve variances to certain requirements of the Land Development Code pursuant to Chapter 82, Article III, Division 3, Subdivision II of the *Sanibel Code*. The general standards to be used in evaluating variance applications are provided in section 82-140 of the *Sanibel Code* and are repeated here for convenience:

The Planning Commission may grant variances upon finding all of the following:

- (1) Variance Standard #1: A literal enforcement of the particular regulation would result in undue and unnecessary hardship to a property owner because the particular shape, size, location or topography of a lot or parcel, or of a structure thereon, would cause practical difficulties that would deprive the owner of reasonable use and enjoyment of such lot or parcel in the same manner as other properties similarly situated.

Staff Comments: The shoreline along the subject vacant property is heavily vegetated with mangroves that extend several feet waterward of the mean high water line. The existing boat dock is largely enveloped by mangrove vegetation in a manner that obstructs reasonable access and use of the dock. To comply with the waterward extension regulation, significant mangrove alterations and impacts would result if the proposed dock was located closer to the shoreline.

- (2) Variance Standard #2: That the special conditions relate to unusual conditions peculiar to the specific lot or parcel or relate to special conditions of the structure involved, and are not generally applicable to other lands or structures similarly situated.

Staff Comments: *The hardship demonstrated is particular to parcels located along the shores of private subdivision canals with extensive mangrove vegetation. Some developed properties in the area have obtained mangrove trimming permits to maintain water views and reasonable access to marine facilities. The subject property is undeveloped and it is apparent that no mangrove trimming has occurred at this lot, nor at the vacant parcel directly across the canal.*

- (3) Variance Standard #3: That the special conditions and circumstances do not result from actions taken by the applicant or proposed by the applicant, and are not otherwise self-imposed.

Staff Comments: *Special conditions of the subject property are not the result of any actions of the property owner, who has owned the property for less than six months, and are not self-imposed.*

- (4) Variance Standard #4: That the applicant has taken all reasonable steps to mitigate or eliminate the requested variance by the acquisition of adjacent lands or the relocation or redesign of the structure involved.

Staff Comments: *The acquisition of adjacent lands is not an option and there is no reasonable alternative to redesign the plans that would alleviate the need for a variance to waterward extension.*

- (5) Variance Standard #5: That the development or use of the subject parcel in some other manner than that proposed, in accordance with the applicable requirements, is not feasible.

Staff Comments: *Relief from the waterward extension limitation will not result in use of the subject parcel other than the proposed marine structures accessory to a residential parcel of land.*

- (6) Variance Standard #6: That the requested variance will not be adverse to the developed neighborhood scheme and will not adversely affect the plan and scheme set forth in this land development code, and will not cause the proposed development to be inconsistent with the Sanibel Plan nor adverse to the health, safety and general welfare of the community.

Staff Comments: *There are numerous neighboring canal-front properties with boat docks and lifts, so the neighborhood scheme will not be adversely affected. The proposed 26-foot waterward extension by the boat lift will leave approximately 36 feet of clearance to the existing boat dock located to the south. The proposed dock and lift are located at least 40 feet from the dock to the east, and over 125 feet from the dock to the west.*

- (7) Variance Standard #7: That the variance granted is the minimum necessary to mitigate the hardship demonstrated.

Staff Comments: The proposed 11-foot wide boat lift is of a standard size similar to others within the canal system. The proposed terminal platform is 4 feet wide, and 3 feet is the minimum dock width allowed by the Sanibel Code. Staff finds a reduction of proposed dock width from 4 feet to 3 feet would strictly satisfy this standard, unless other specific considerations for safety is recognized by Planning Commission.

The applicant's response to the seven variance standards is provided as **Attachment A** to this Staff Report.

PUBLIC COMMENT

To date, staff has received no public comments pertaining to the variance request.

CONCLUSION

The applicant proposes a dock and boat lift design that presents no navigational obstruction to other marine vessels within the canal. The extent of the mangrove vegetation precludes any alternative design that moves the dock closer to the shoreline. The outermost piling of the proposed boat lift will extend the same distance into the waterway as mooring a vessel to the existing dock. Staff finds the application consistent with LDC Section 82-140, standards 1 through 6, and standard number 7 could be strictly satisfied by reducing the terminal platform width to three feet, the minimum allowed by Code.

If the Planning Commission finds that the application meets the seven variance standards, then Staff recommends the following conditions be included with the approval of the variance and the implementation development permit:

1. The dock and boat lift structure shall not extend waterward from the mean high water line more than 26 feet – as shown on the proposed plans (**Attachment E**).
2. Comply with the site plan provided as Attachment E, subject to revision of dock width from 4 feet (proposed) to 3 feet (minimum allowable), as to reduce the overall water-ward extension of marine accessory structures at the subject parcel.
3. An as-built survey shall be submitted to the City demonstrating compliance with the approved plans prior to the issuance of the completion certificate.
4. The minor trimming ($\leq 25\%$ of the leaf surface area) of branches and/or prop roots on four (4) red mangroves and one (1) white mangrove is authorized, and no mitigation is required unless the mangroves don't survive the trimming.
5. The alteration (removal or destruction) of four (4) red mangroves at 5", 4" and 1" in diameter is authorized. Mitigation is required at a 2:1 ratio with 25-foot tall trees

for the 5" diameter tree, 20-foot tall trees for the 4" diameter trees, and 5-foot tall trees for the 1" diameter tree. Mitigation plantings must be installed on site and are subject to an 80-percent survival success criteria for five years following the date of initial planting. A mitigation plan must be submitted to Natural Resources for review and approval prior to issuance of the Development Permit.

6. Any future trimming of mangroves to maintain dock access or views of the water, including trimming of mangroves installed as part of the approved mitigation plan, requires a separate annual mangrove trimming permit, and all permit conditions must be strictly adhered to. If unanticipated or unauthorized impacts occur as a result of the project, additional mitigation may be assessed during the final inspection.
7. All City-listed invasive exotic species of plants shall be removed from the property and the property must be maintained free of all eight City-listed invasive exotics in perpetuity.
8. Conical piling caps or any other anti-bird roosting devices shall not be placed on the dock and lift pilings.
9. Any proposed outdoor dock lighting shall be in compliance with the standards and requirements of the Land Development Code, including:
 - a. Lights on docks, boat lifts, boat davits, and mooring pilings shall be no more than the minimum necessary as an aid to navigation and to illuminate the surface of the dock and access walkway as a safety measure for those walking on these surfaces at night.
 - b. A light installed as an aid to navigation shall be in conformance with the U.S. Coast Guard standards.
 - c. Existing or installed lights to illuminate the surface of a dock or walkway shall:
 - i. Be a minimum of 11 feet apart.
 - ii. Be so shielded and directed that the light falls only on the surface of the dock or walkway.
 - iii. Use an incandescent bulb with a maximum of 25 watts.
 - iv. Number no more than six (6).
 - v. Be installed so that no part of the light fixture is more than 30 inches above the surface of the dock or walkway.
10. All other standard requirements for accessory marine structures contained in the Land Development Code shall be met including, but not limited to, the following:

- a. No fill or dredging is authorized by the approved variance or development permit.
 - b. The height of the dock structure and boat lift pilings shall be limited to a maximum of three (3) feet and ten (10) feet, respectively, above mean high water.
 - c. Materials used in the boat lift construction shall comply with the standards in Land Development Code Section 126-885.
 - d. No double berthing of vessels shall be permitted.
 - e. Roofing and enclosures are not permitted on any dock, boat davit, or boat lift structure, including mooring pilings.
 - f. Turbidity screening shall be employed during subsurface construction, to remain in place a minimum of twenty-four (24) hours to ensure protection of water quality in the area.
11. The applicant shall obtain all applicable City development and building permits and any approvals required from other governmental agencies, including the Florida Department of Environmental Protection and the United States Army Corps of Engineers.

INDEX TO STAFF REPORT ATTACHMENTS

Attachment	A	-	Variance Application and Applicant's Response to Variance Standards
Attachment	B	-	Site Location Map and Aerial Photographs
Attachment	C	-	Survey
Attachment	D	-	Existing Dock Layout
Attachment	E	-	Proposed Dock & Lift Plans
Attachment	F	-	Natural Resources Memorandum

jgo/V21-12890StaffReport



CITY OF SANIBEL
Planning Department
APPLICATION FOR VARIANCE
(WITH APPLICATION INFORMATION)

Attachment A
Application No. 21-12890V
Fowler – Dock & Lift Variance
**Variance Application & Applicant's
Response to Variance Standards**

STAFF USE ONLY

APPLICATION No: 21-12890 FILING DATE: 6.21.21 ACCEPTED BY: JGO FEE: 2,881 —

PART I. PARCEL IDENTIFICATION

TAX STRAP NUMBER: 1 1 - 46 - 2 1 - T 3 - 0 0 9 0 0 . 0 0 8 B

STREET ADDRESS OF PROPERTY: 5821 PINE TREE DR.

PART II. OWNER & APPLICANT INFORMATION

NAME OF OWNER: JAMES and DEBORAH FOWLER

Owner's Mailing Address: 346 HOLLY POINT ROAD, CENTERVILLE, MASS. 02632

Owner's Phone No: 508-732-1814 Business — Fax —

Owner's Email Address: deba@fowlerandsonsinc.com / jimfowler@fowlerandsonsinc.com

NAME OF APPLICANT: STEMIC MARINE CONSTRUCTION / MICHAEL JONES

Applicant's Address: 16420 Old US41 FORT MYERS, FL 33912

Applicant's Phone No: — Business 239-481-7143 Fax 239-481-3563

Applicant's Email Address: mtjones@stemicmarine.com

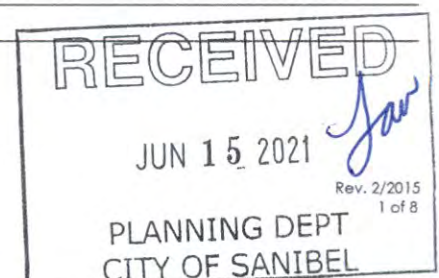
Applicant's Interest in Property: GENERAL CONTRACTOR

PART III. PROVIDE A BRIEF DESCRIPTION OF THE PROPOSED DEVELOPMENT

REMOVE: EXISTING DOCK. CONSTRUCT A NEW, 4'x40' WITH A 4'x WALKWAY
AND INSTALL A 10,000# BOAT LIFT

IDENTIFY THE LAND DEVELOPMENT CODE SECTION(S) FROM WHICH VARIANCE IS REQUESTED:

82-138



APPLICATION FOR VARIANCE (WITH APPLICATION INFORMATION)

PART IV. ATTACHMENTS CHECKLIST

The information and attachments requested as part of this application are the minimum necessary to determine compliance with the requirements of the Sanibel Plan and the Land Development Code (LDC). The city may require additional information, or waive certain requirements, at any time during the application process depending upon the nature of the variance request. (Ref. Land Development Code Section 82-138). For a complete explanation of each item, refer to the Planning Department handout entitled "Instructions for Permits and Other Applications of the Sanibel Island Development Code".


- ☒ DESCRIBE HOW THIS APPLICATION MEETS THE SEVEN (7) VARIANCE STANDARDS
- ☒ VERIFICATION OF PERMITTED RESIDENTIAL DENSITY (See LDC Section 86-91 and 86-92)
- ☒ DEED OR LEE COUNTY OWNER OF RECORD
- ☒ OWNER'S AUTHORIZATION (Certified Form Available in the Planning Department)
- ☒ OTHER AGENCY PERMITS (Certified Statement - Required permits - Copy of Application/Form)
- ☒ LOCATION MAP
- ☒ SITE DEVELOPMENT PLAN (1" = 20')
- ☒ DRAINAGE PLAN OR VERIFICATION OF EXISTING DRAINAGE IMPROVEMENTS
- ☒ EXTERIOR LIGHTING PLAN
- ☒ VEGETATION PLAN
- ☒ WILDLIFE HABITAT IDENTIFICATION AND PLAN FOR PRESERVATION
- ☒ VERIFY GOPHER TORTOISES ARE PROTECTED ON SITE OR HAVE BEEN REMOVED
- ☒ IWA - WATER AVAILABILITY LETTER
- ☒ BUILDING PERMIT APPLICATION
- ☒ FLOOR PLANS (1/4" = 1')
- ☒ TYPICAL WALL SECTION (1/4" = 1')
- ☒ BUILDING ELEVATIONS (Front, Back, and Side; Showing Height And Setback Compliance)
- ☒ FLOODPROOFING CERTIFICATION (For Coast High Hazard Areas)
- ☒ OTHER INFORMATION REQUIRED FOR COMPLIANCE WITH THE LAND DEVELOPMENT CODE:

PART V. PUBLIC HEARING NOTIFICATION REQUIREMENT

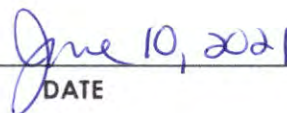
- ☒ PROVIDE NAME AND ADDRESS LABELS FOR ALL PROPERTY OWNERS WITHIN A RADIUS OF 300 FEET OF THE EXTREME LIMITS TO THE PARCEL PROPOSED FOR DEVELOPMENT (to be obtained from Lee County Geographic Information System Department). REFER TO THE "Adjacent Property Owners" SECTION OF THE "Instructions for Permits and Other Applications of the Sanibel Land Development Code" FOR DETAILS ON OBTAINING THIS INFORMATION.

***** CERTIFICATION *****

I hereby certify that the information contained in this application and the attachments hereto are true and correct to the best of my knowledge and belief. Furthermore, I acknowledge that the City has the right to inspect the subject property in conjunction with this development permit application. (Please advise the City of any restrictions or limitations on the inspections.)



SIGNATURE OF OWNER / OWNER'S AUTHORIZED REPRESENTATIVE


DATE

NOTE TO THE OWNER/APPLICANT: A development permit is required in addition to this variance request in order to implement the use and may be filed concurrently or subsequently to this application. If filed subsequently to this application, the development permit must be obtained within a period of twelve (12) months after variance approval. The proposed development may be subject to private deed restrictions or covenants. It is the applicant's responsibility to verify with the appropriate property owners association whether the proposed development complies with the applicable deed restrictions or covenants. **The City does not enforce deed restrictions or act as an arbitrator between the applicant and the association.**

CITY OF SANIBEL
Planning Department
VARIANCE
(WITH APPLICATION INFORMATION)

The Planning Commission may grant variances only upon finding that the request meets the seven standards set forth in Land Development Code Section 82-140. Describe how your request meets each requirement:

1. A literal enforcement of the particular regulation would result in undue and unnecessary hardship to a property owner because the particular shape, size, location, or topography of a lot or parcel, or of a structure thereon, would cause practical difficulties that would deprive the owner of reasonable use and enjoyment of said lot or parcel in the same manner as other properties similarly situated:
We are asking for relief from 20% waterward extending rule. To move the dock and the lift away from the mangroves, the structures will need relief from the current rules.

2. That the special conditions relate to unusual conditions peculiar to the specific lot or parcel or relate to special conditions of the structure involved, and are not generally applicable to other lands or structures similarly situated:
The canal is wide enough for dock and lift, however we wish to avoid impacting the mangroves.

3. That the special conditions and circumstances do not result from actions taken by the applicant or proposed by the applicant, and are not otherwise self-imposed:
In order to protect the mangroves, proposed structures will need requested relief.

4. That the applicant has taken all reasonable steps to mitigate or eliminate the requested variance by the acquisition of adjacent lands or the relocation or redesign of the structure involved:
The entire canal is lined with mangroves. Additional lands does not solve the problem. The structures is the minimum that will solve the owners' issues.

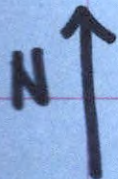
5. That the development or use of the subject parcel in some other manner than that proposed, in accordance with the applicable requirements, is not feasible:
There is not enough room for placement of dock with lift if rule is enforced.

6. That the requested variance will not be adverse to the developed neighborhood scheme and will not adversely affect the plan and scheme set forth in this land development code, and will not cause the proposed development to be inconsistent with the Sanibel Plan nor adverse to the health, safety, and general welfare of the community:
The proposed work is over a seldom used dead end canal. Variances for similar extensions have been granted on canals.

7. That the variance granted is the minimum necessary to mitigate the hardship demonstrated:
The proposed layout of the dock and lift are the minimum necessary to safely and effectively access the dock and then to safely and effectively enter and exit the boat lift in a boat while not affecting or limiting the use of the waterway by others.

JAMES & Deb Fowler
5821 Pine Tree Dr.
Sanibel, FL 33957

latitude longitude
26-28-30.7 -82-10-8.7



CHAPEL BY THE SEA
1 Oster Ct
2 Sandpiper Ct
3 Sea Hibiscus Ct
4 Seascape Ct
5 Sunset Captiva Ln
6 Ushin Ct
Captiva
Laika Ln SW
Wrightman Ln SW
Andy Rosse Ln
Chapin Ln
Gore Ln
Murmond Ln
Captiva Island

T 45 S
T 46 S

Wulfert

33957
SANIBEL
ISLAND

Sanibel

PINE ISLAND SOUND
AQUATIC PRESERVE

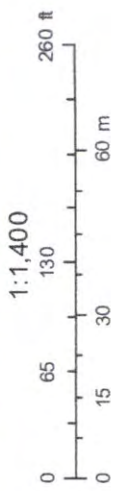
J.N. "DING"
DARLING
NATIONAL WILDLIFE
REFUGE

Attachment B

Application No. 21-12890V
Fowler - Dock & Lift Variance
Site Location Map & Aerial Photos

5821 Pine Tree Dr
SANIBEL, FL 33957

GeoView Map



Air Photos: 2020 Hi-Res (4 inch)

- Hospital Locations
- School Locations
- Library Locations
- CCC_Parks
- County Boundary
- US 41
- Major Roads Medium
- Other Highways
- Other Roads
- Parcels Near

This map is NOT a legal land survey and should not be used or relied upon as such. No warranties, express or implied, are provided with the data, use, accuracy or interpretation.

5821 Pine Tree Drive (vacant)

2021 AERIAL



© All Pictometry

5821 Pine Tree Drive (vacant)

2006 AERIAL



© 2006 Pictometry

50' E ALONG SAID CENTERLINE FOR
IN SOUTHEASTERLY ALONG SAID
RIGHT OF RADIUS 399 FEET FOR
-B OF UNRECORDED CASTAWAY
ST LINE OF SAID LOT 10-B FOR
5 FEET TO THE SOUTHEAST CORNER
IG SAID EAST LINE OF SAID LOT
G.

DESCRIBED ROADWAY EASEMENT

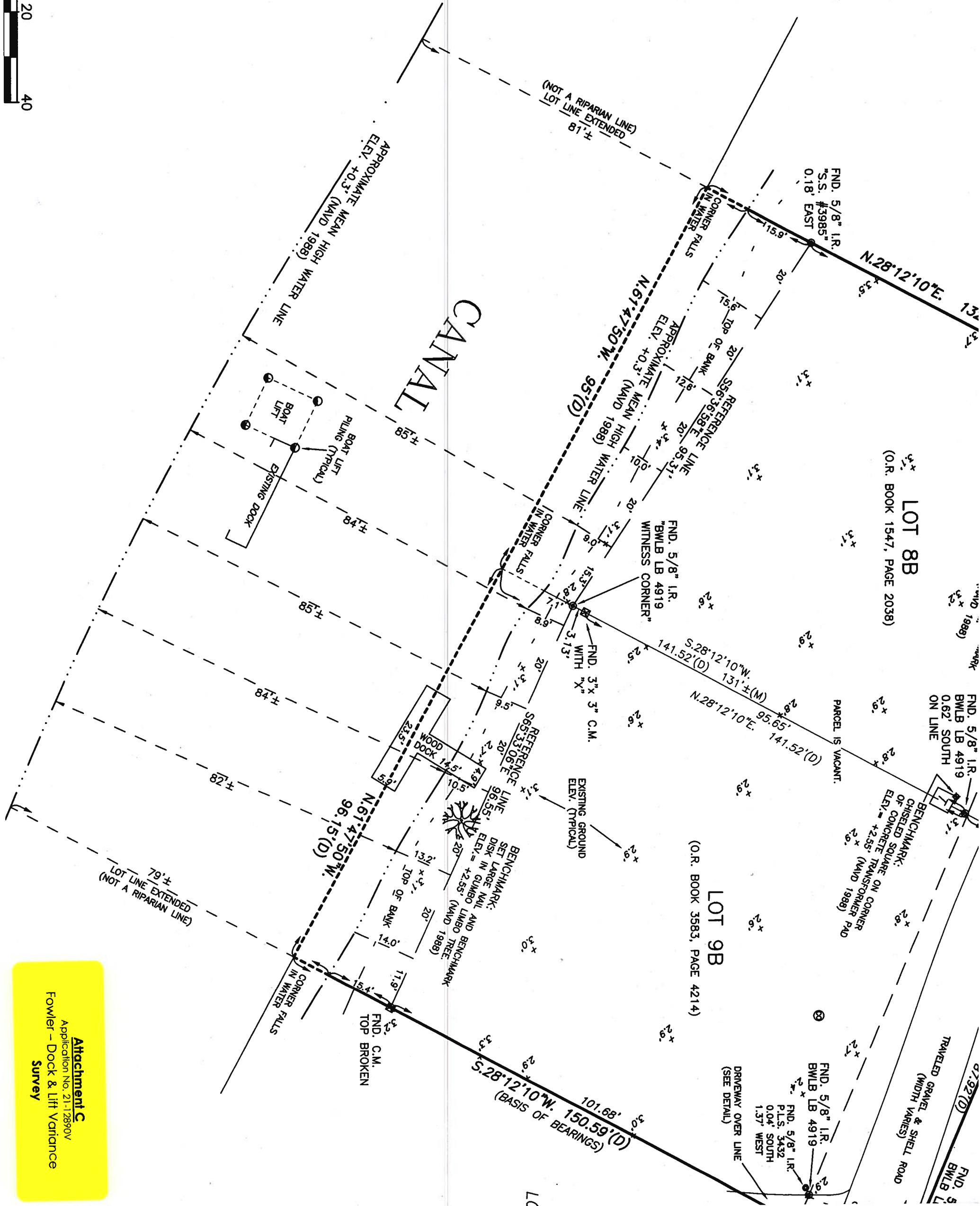
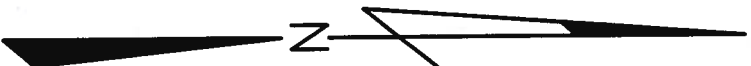
as 2037 and 2038:

Lot 6 of Section 11,
nty, Florida, which lot or

section of the East line of
the Road No. S-867
West along said center line
uthwesterly prolongation of a
run North 36°12'10" East
along the Northwestern line of
407.18 feet; thence run
ie of said public roadway
28°12'10" East for 25 feet
thence run South 56°58'00"
ence run South 61°47'50"
point of curvature; thence run
e arc of a curve to the left
t of reverse curvature; thence
g the arc of a curve to the
a point of reverse curvature;
ie, along the arc of a curve
t to a point of tangency;
centerline for 41.45 feet to
beginning continue South
44 feet; thence run South
rs of a boat canal; thence
of a boat canal for 95 feet;
feet to the point of

LOT 8B
(O.R. BOOK 1547, PAGE 2038)

LOT 9B
(O.R. BOOK 3583, PAGE 4214)

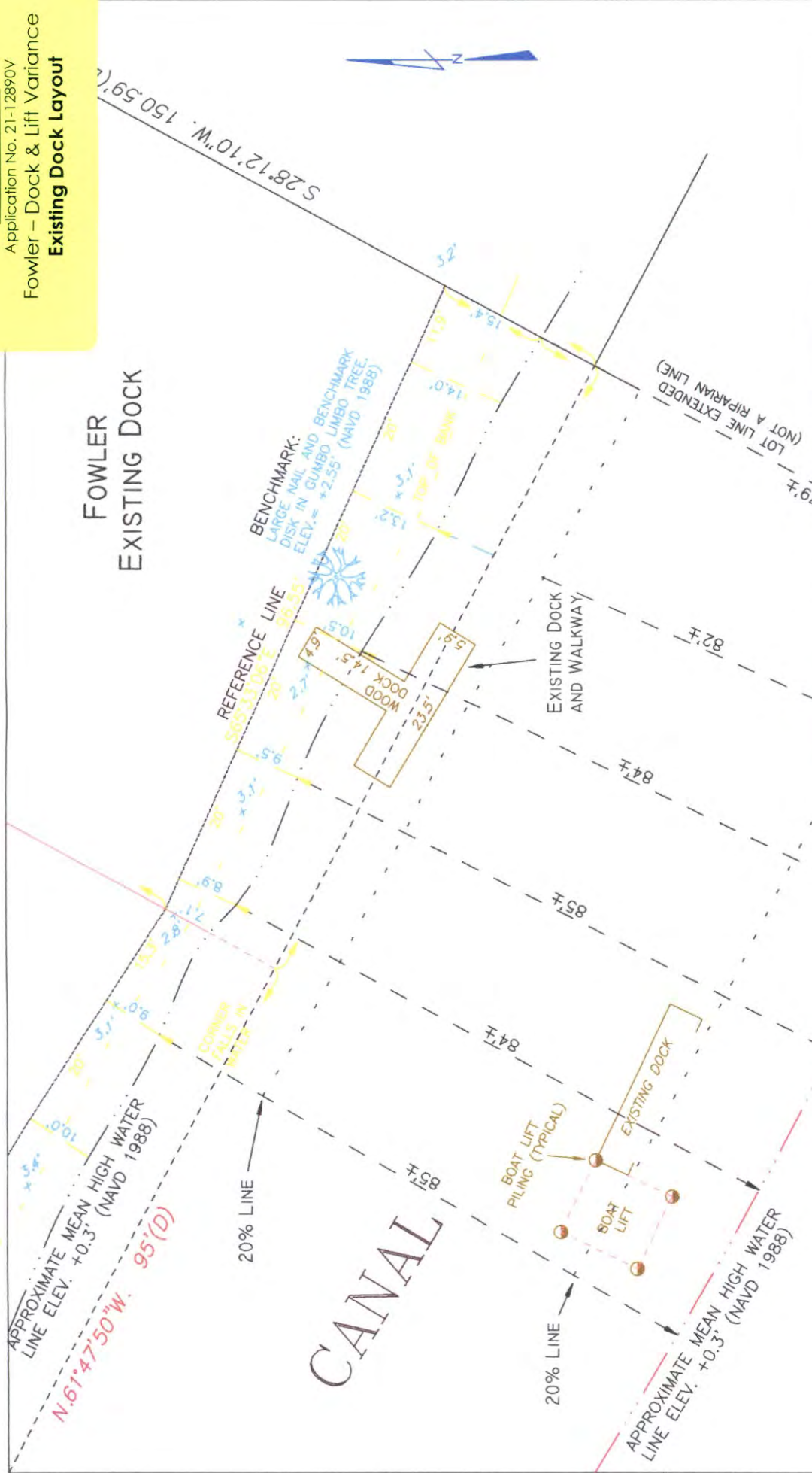


Attachment D

Application No. 21-12890V

Fowler - Dock & Lift Variance
Existing Dock Layout

FOWLER
EXISTING DOCK



 Office 239-481-7143 Fax 239-481-3563 www.stemicmarine.com CGC 1527841	NAME <u>FOWLER</u>	CONSTRUCTION OF A 4' x 40' TIMBER DOCK WITH A 4' x 17' WALKWAY. ALSO INCLUDES THE INSTALLATION OF A 10,000# ALUMINUM BOAT LIFT.
	JOB ADDRESS <u>5821 PINE TREE DR.</u>	
Scope of Work:		
Date <u>5-18-21</u> Scale <u>1"=20'</u> Dwg# <u>1</u>		
Total SQ FT <u>209.7</u>		Total SQ FT beyond MHW <u>174.42</u>

MATERIALS TO BE USED:

- 8" ROUND MARINE PILING WITH 2.5 C.C.A. TREATMENT
- 2" x 8" ROUGH SAWN SOUTHERN YELLOW PINE WITH .60 C.C.A. TREATMENT
- 1" x 6" WEAR DECK DECKING
- FRAMING WILL BE SECURED USING 5/8" 305 STAINLESS STEEL BOLTS
- DECKING WILL BE SECURED USING #10 x 3" 305 STAINLESS STEEL SCREWS

Drawing accepted by _____

Fowler – Dock & Lift Variance

S 28° 12' 10" W. 150.59'



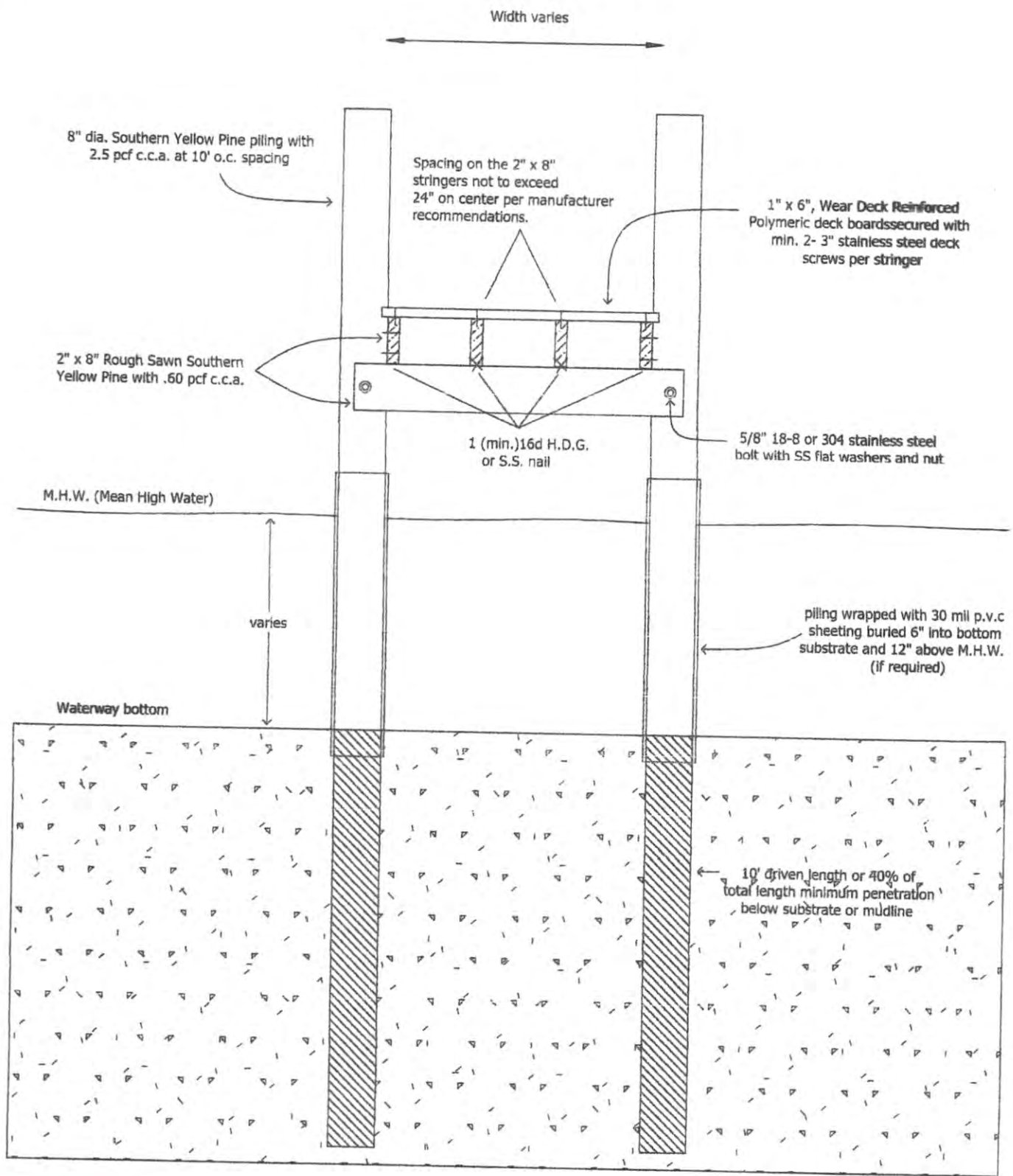
- FRAMING WILL BE SECURED USING 5/8" 305 STAINLESS STEEL BOLTS
- DECKING WILL BE SECURED USING #10 X 3" 305 STAINLESS STEEL SCREWS



CGC 1527841

Total SQ FT	228	Total SQ FT beyond MHW	200
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Fowler



Typical Walkway Section

Not to Scale



Office 239-481-7143
Fax 239-481-3563
www.stemicmarine.com

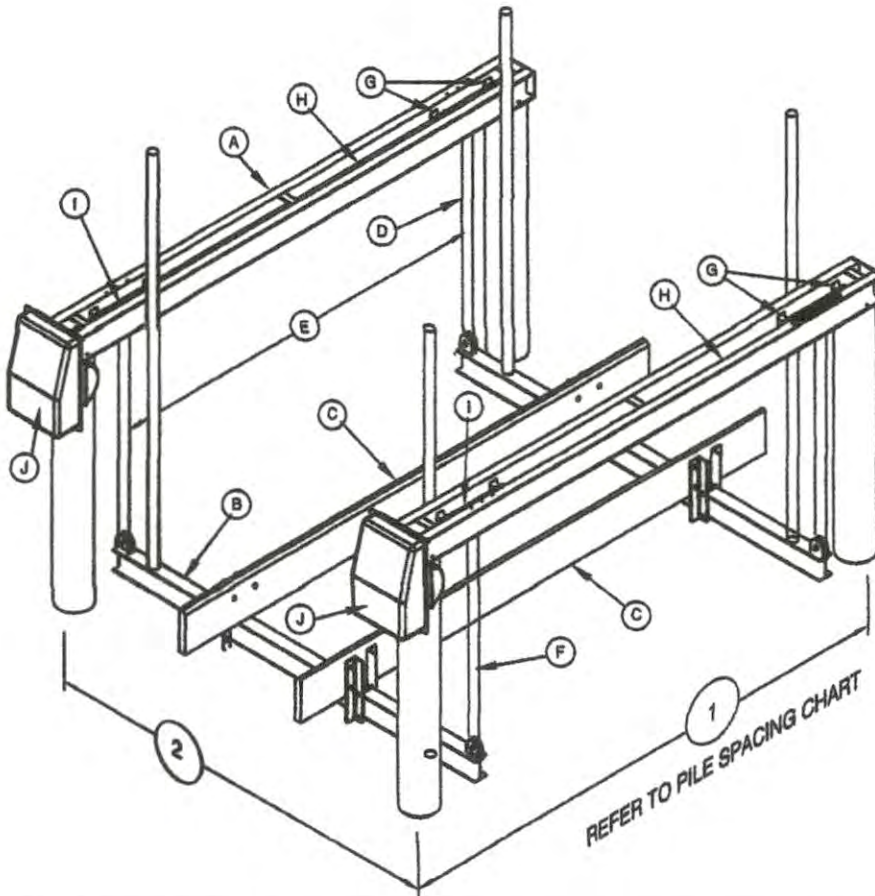
CGC 041839
CBC 058440

ACE ENGINEERED 4 POST, 2 MOTOR BOAT LIFTS

Fowler

PILE SPACING CHART
The boat center of gravity needs to be set in the center of the top beam

Lift Capacity		1" Dimension		2" Dimension		Recommended Pile Diameters	
Lb.	Kg.	FL	M	FL	M	in.	mm
4,500	2041	11	3.35	10	3.0	8	203.2
7,000	3175	12	3.66	12	3.66	10	254
10,000	4540			12.5	3.81		
14,000	6350			14	4.27		
16,000	7257	14	4.27	16	4.88	12	304.8
20,000	9072						
24,000	10,886	16	4.88				



STRUCTURAL ENGINEERING REVIEW

THIS CONSTRUCTION HAS BEEN DESIGNED AS A MAIN WIND FORCE RESISTING SYSTEM, WITH CALCULATED GRAVITY AND WIND LOADS IN COMPLIANCE WITH THE FLORIDA BUILDING CODE 2010, SECTION 1609, ADM 2005, ASCE/SEI 7-10, AND "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" TO WITHSTAND THE WIND LOADS ASSOCIATED WITH AN ULTIMATE WIND SPEED OF 170 MPH, EXPOSURE "D", RISK CATEGORY "I". ARNOLD/SANDERS CONSULTING ENGINEERS HAS NO CONTROL OF THE MANUFACTURING, PERFORMANCE, OR INSTALLATION OF THIS PRODUCT. THESE GENERIC PLANS WERE ENGINEERED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES AND DATA PROVIDED BY THE MANUFACTURER.

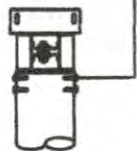
J.L. Sanders
7-16-14

Arnold/Sanders Consulting Engineers, Inc.
Certificate of Authorization 9451
12551 McGregor Blvd., Suite 103, Ft. Myers, FL 33919
239-257-3555 Fax 239-257-3771

J.L. SANDERS
Reg. Florida No. 66361
Date:

SIGNATURE NOT VALID WITHOUT RAISED SEAL

STAINLESS STEEL PILING
MOUNT BRACKET, 4-1/2"
STAINLESS STEEL LAG SCREWS
USED TO CONNECT THE
BRACKETS TO THE PILING AND
2-1/2" CARRIAGE BOLTS USED
TO CONNECT THE BRACKETS
TO THE LIFT CHANNELS



NOTE:

THIS STRUCTURE WILL WITHSTAND WIND LOADS ASSOCIATED WITH AN ULTIMATE WIND SPEED OF 170 MPH, EXPOSURE "D", RISK CATEGORY "I" CALCULATED PER F.B.C. 2010 AND ASCE/SEI 7-10. BOATS SHALL NOT BE STORED ON LIFT DURING HIGH WIND EVENTS.

IN GENERAL, PILING PENETRATION TO BE 10' INTO THE SAND BOTTOM OR 5' INTO THE ROCK STRATA. SUB-SURFACE CONDITIONS CAN VARY GREATLY, THE CONTRACTOR SHALL VERIFY ALL PILE CAPACITIES. ALL PILING TO BE 2.5 C.C.A. PRESSURE TREATED WOOD.

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J)

LIFT CAPACITY		TOP BEAM CHANNEL 2 EACH		CRADLE I-BEAM 2 EACH		BUNK BOARDS (PT)	CABLE SIZE		CABLE SPREAD		GUIDE POST HGTH	BRGS	DRIVE SHAFT	WINDER DIA	MOTOR HP VOLTAGE	INCHES OF LIFT PER MIN	RECOM PILING SIZES
Lbs	Kg	INCHES	MM	INCHES	MM		INCHES	MM	IN	MM							
4,500#	2041 kg	4 H x .15 2 W x .23 140" OAL	101.6h x 3.8mm 50.8w x 5.8mm 3.6m OAL	6 H x .19 4 W x .29 120" LGTH	152.4h x 4.8mm 101.6w x 7.4mm 3.05m OAL	2x6x14 BRUSH SAWN CHAPERED 50.8mm x 203.2mm x 3.7m	4 - 5/16" x15' ST ST 1 PART	4 - 7.94mm x4.6m ST ST 1 PART	98"	2.5m	80" 2M	10 - 2" (50.8 mm) EXTRUDED 6061-T6 ALUM.	1.0" DIA. (48.3 MM) 9 GAUGE GALV. PIPE	2 - 3/4" HP 120V/20A 240V/10A	27"	8" DIA 203.2 mm	
7,000#	3175 kg	5 H x .15 2.25 W x .28 x153" OAL	127h x 3.8mm 57.2w x 7.1mm x 3.9 m OAL	6 H x .19 4 W x .29 144" LGTH	152.4h x 4.8mm 101.6w x 7.4mm 3.6 m OAL		4 - 5/16" x15' ST ST 1 PART	4 - 7.94mm x4.6m ST ST 1 PART	98"	2.5m							
10,000#	4536 kg	6 H x .17 2.5 W x .29 x153" OAL	152.4hx4.3mm 63.5wx7.4mm 3.9m OAL	8 H x .23 5 W x .35 150" LGTH	203.2hx 5.8mm 127w x 8.9mm 3.8 m OAL		4 - 5/16" x30' ST ST 2 PART	4 - 7.94mm x9.2m ST ST 2 PART	110"	2.8m							
14,000#	6350 kg	7 H x .17 2.75 W x .29 x153" OAL	177.8hx4.3mm 69.9wx7.4mm 3.9 m OAL	8 H x .25 5 W x .41 150" LGTH	203.4h x 6.4mm 127w x 10.4mm 3.8 m OAL	2x6x14 BRUSH SAWN CHAPERED 50.8mm x 203.2mm x 3.7m	4 - 5/16" x30' ST ST 2 PART	4 - 7.94mm x9.2m ST ST 2 PART	110"	2.8m	120" 3.1M	10 - 2" (50.8 mm) EXTRUDED 6061-T6 ALUM.	1.0" DIA. (48.3 MM) 9 GAUGE GALV. PIPE	2 - 3/4" HP 120V/20A 240V/10A	12-1/2" 317.5mm	10" DIA 254 mm	
16,000#	7257 kg	8 H x .19 3 W x .35 x153" OAL	203.2hx4.8mm 76.2wx8.9mm 3.9 m OAL	10 H x .25 6 W x .41 168" LGTH	254hx 6.4mm 152.4wx10.4mm 4.3 m OAL		4 - 5/16" x30' ST ST 2 PART	4 - 7.94mm x9.2m ST ST 2 PART	110"	2.8m							
20,000#	9071 kg	8 H x .25 3.75 W x .41 x177" OAL	203.2hx6.4mm 95.3wx10.4mm 4.5 m OAL	10 H x .25 6 W x .41 192" LGTH	254hx6.4mm 152.4wx10.4mm 4.9 m OAL		4 - 5/16" x45' ST ST 3 PART	4 - 7.94mm x13.7m ST ST 3 PART	122"	3.1m							
24,000#	10886 kg	8 H x .25 3.75 W x .41 x201" OAL	203.2hx6.4mm 95.3wx10.4mm 5.1 m OAL	10 H x .29 6 W x .50 192" LGTH	254hx7.4mm 152.4wx12.7mm 4.9 m OAL	2x6x14 BRUSH SAWN CHAPERED 50.8mm x 203.2mm x 3.7m	4 - 5/16" x45' ST ST 3 PART	4 - 7.94mm x13.7m ST ST 3 PART	134"	3.4m	120" 3.1M	10 - 2" (50.8 mm) EXTRUDED 6061-T6 ALUM.	1.0" DIA. (48.3 MM) 8 GAUGE GALV. PIPE	2 - 1 HP 120V/20A 240V/10A	9"	12" DIA 304.8 mm	

PUB. 7-16-2014

Ace Boat Lifts, 7990 Mercantile St., North Fort Myers, FL 33917

**City of Sanibel
Natural Resources
Department**

Memorandum

To: Josh Ooyman, City Planner
From: Dana Dettmar, Environmental Biologist
Subject: Variance Application No. 21-12890 (Dock & Boat Lift); 5821 Pine Tree Drive
Date: September 2, 2021

On July 29, 2021, the Natural Resources Department performed site inspections to evaluate the natural resource-related impacts of a variance request to the waterward extension limit to install a new dock and boat lift at 5821 Pine Tree Drive. There is an existing dock on the property that is in a state of disrepair. The proposed dock and lift footprint will extend approximately 9 feet beyond the waterward extension limit. This is a manmade canal and there are no seagrasses, oysters, or other protected marine organisms present in the area where the applicant is proposing to install the dock and boat lift.

A mangrove fringe is present along the shoreline of the subject property and abuts the landward side of the existing dock. Although not formally reviewed, some alternatives to the requested variance, such as placing the lift at an angle or perpendicular to the end of the existing dock or relocating the existing dock landward would likely result in significant impacts to the mature mangroves along the shoreline that would not be supported by Natural Resources because it would be inconsistent with the City's environmental performance standards (Sec. 126-651).

A vegetation plan consisting of mangrove impacts, necessary to allow for installation of the dock and boat lift, was provided by the applicant and flagged on-site. Of note, the mangrove impacts described in the vegetation plan are the same impacts that would need to occur in order to access and utilize the existing dock. The location of the proposed dock access walkway through the mangrove fringe minimizes the extent of mangrove impacts by utilizing the footprint of the existing dock access (Photo 1). The applicant proposes to perform minor trimming ($\leq 25\%$ of the leaf surface area) of branches and/or prop roots on four (4) red mangroves and one (1) white mangrove. The extent of this trimming is consistent with the Sanibel Land Development Code's Mangrove Trimming and Preservation Ordinance and no mitigation will be required. However, if any of the mangroves die as a result of the trimming mitigation will be required. The applicant also proposes to alter (remove or destroy) four (4) red mangroves at 5", 4", 4" and 1" in diameter. Required mitigation for these impacts will be 2:1 with 25-foot tall trees for the 5" diameter tree, 20-foot tall trees for the 4" diameter trees, and 5-foot tall trees for the for the 1' diameter tree. Mitigation plantings must be installed on-site and are subject to an 80-percent survival success criteria for five years following the date of initial planting. A mitigation plan must be submitted to Natural Resources for review and approval prior to issuance of the Development Permit.

Any future trimming of mangroves to maintain dock access or views of the water, including trimming of mangroves installed as part of the approved mitigation plan, requires a separate annual mangrove trimming permit, and all permit conditions must be strictly adhered to. If unanticipated or unauthorized impacts occur as a result of the project, additional mitigation may be assessed during the final inspection.

All City listed invasive exotic plants, including but not limited to, Brazilian pepper, lead tree, air potato, and mother-in-law's tongue are required to be removed and the site maintained free of these pest plants in perpetuity.

See attached photos, taken on July 29, 2021.



Figure 1. Google Earth 2017 aerial image 5821 Pine Tree Drive.



Photo 1. Current shoreline condition with existing and proposed dock access



Photo 2. Existing dock access



Photo 3. Looking west at proposed footprint



Photo 4. Looking west at proposed footprint terminus



Photo 5. Looking east at proposed footprint



Photo 6. Looking east at proposed footprint terminus