

BOUNDARY SURVEY

LOTS 23 & 24 of "HIGHLAND BEACH ISLES"  
PLAT BOOK 25, PAGE 154  
SECTION 4, TOWNSHIP 47 SOUTH, RANGE 43 EAST,  
PALM BEACH COUNTY, FLORIDA

LINE TABLE LESS PARCEL 1		
Line	Bearing	Distance
L1	WEST	58.14'
L2	NORTH	17.10'
L3	WEST	48.17'
L4	N48°35'25"W	6.00'
L5	NORTH	10.00'
L6	EAST	10.00'
L7	NORTH	25.67'
L8	WEST	2.67'
L9	NORTH	10.67'
L10	EAST	18.92'
L11	S45°00'00"E	8.13'
L12	SOUTH	4.25'
L13	EAST	20.68'
L14	SOUTH	40.31' (C)

LINE TABLE LESS PARCEL 2		
Line	Bearing	Distance
L1	WEST	58.14'
L15	NORTH	64.10'
L16	WEST	17.55'
L17	NORTH	26.37'
L18	EAST	9.00'
L19	SOUTH	0.37'
L20	EAST	9.67'
L21	NORTH	14.00'
L22	WEST	4.67'
L23	NORTH	20.00'
L24	EAST	20.00'
L25	SOUTH	8.00'
L26	EAST	24.67'
L27	NORTH	17.00'
L28	EAST	10.00'
L29	NORTH	0.68'
L30	EAST	10.00'
L31	NORTH	4.33'
L32	EAST	10.12'
L33	NORTH	10.00'
L34	EAST	10.00'
L35	SOUTH	52.67'
L36	WEST	20.12'
L37	SOUTH	15.00'
L38	WEST	30.00'
L39	SOUTH	16.33'
L40	WEST	31.12'

SURVEY NOTES:

- THIS IS A BOUNDARY SURVEY SURVEY AS DEFINED IN THE STANDARDS OF PRACTICE FOR SURVEYING AND MAPPING IN CHAPTER 5J-17 FLORIDA ADMINISTRATIVE CODE.
- THIS SURVEY IS CERTIFIED TO VILLA DEL ALTO PROP OWNERS AND B&M MARINE CONSTRUCTION, INC.
- THIS SURVEY IS INTENDED EXCLUSIVELY FOR THE USE BY THOSE TO WHOM IT IS CERTIFIED. IT IS NOT TO BE USED BY OTHERS FOR CONSTRUCTION, PERMITTING, DESIGN OR ANY OTHER USE WITHOUT THE WRITTEN CONSENT OF TERRAQUATIC, INC.
- THIS SURVEY, AND ANY REPRODUCTION THEREOF, IS NOT VALID WITHOUT AN ORIGINAL OR VERIFIED DIGITAL SIGNATURE AND SEAL OF A FLORIDA REGISTERED SURVEYOR. ADDITIONALLY, THIS SURVEY IS NOT VALID IF PRINTED BEARING A DIGITAL SIGNATURE AND SEAL.
- OTHER THAN THOSE SHOWN ON THE REFERENCED PLAT, NO SEARCH OF THE PUBLIC RECORDS WAS PERFORMED FOR EASEMENTS, ENCUMBRANCES OR OTHER INSTRUMENTS OF RECORD WHICH MAY AFFECT THIS PARCEL OF LAND.
- THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1" = 20' OR SMALLER.
- UNDERGROUND UTILITIES WERE NOT LOCATED AS PART OF THIS SURVEY.
- GEOGRAPHIC AND PLANE COORDINATES SHOWN HERON ARE RELATIVE TO THE NORTH AMERICA DATUM OF 1983, FLORIDA STATE PLANE, ZONE 901, TRANSVERSE MERCATOR PROJECTION IN THE U.S. SURVEY FOOT UNIT OF MEASUREMENT.
- LOCATIONS OF ALL IMPROVEMENTS WERE OBTAINED USING REAL TIME KINEMATIC GPS METHODOLOGIES WITH BROADCAST CORRECTIONS FROM THE TRIMBLE VIRTUAL REFERENCE NETWORK AND ARE ACCURATE TO THIRD ORDER, CLASS II.
- THE SPECIFIC PURPOSE OF THIS SURVEY IS TO SHOW THE LOCATION OF EXISTING AND PROPOSED MARINE IMPROVEMENTS RELATIVE TO THE INTRACOASTAL WATERWAY NAVIGATION CHANNEL AND RELEVANT SETBACK LINES.
- WATER DEPTHS EXCEED -4' MLW ALONG AND ADJACENT TO THE EXISTING SEAWALL.

CERTIFICATION:

I HEREBY CERTIFY THAT THE ATTACHED BOUNDARY SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AS SURVEYED UNDER MY DIRECTION ON 3/17/21. I FURTHER CERTIFY THAT THIS BOUNDARY SURVEY MEETS THE STANDARDS OF PRACTICE AS SET FORTH IN CHAPTER 5J-17 ADOPTED BY THE FLORIDA BOARD OF SURVEYORS AND MAPPERS PURSUANT TO FLORIDA STATUTE 472.027.

KENNETH C. JACKSON, PSM - FLORIDA REGISTRATION NUMBER 4549

LEGEND

(C)	CALCULATED
FND	FOUND
EXST	EXISTING
IRC	IRON ROD & CAP
NL/D	NAIL & DISK
ORB	OFFICIAL RECORDS BOOK
(P)	PLAT
PB	PLAT BOOK
PG	PAGE
POC	POINT OF CURVATURE
RNG	RANGE
SEC	SECTION
TWP	TOWNSHIP
TYP	TYPICAL

LEGAL DESCRIPTION (PER O.R.B. 3012, PAGE 612)

LOTS 23 AND 24 OF HIGHLAND BEACH ISLES SUBDIVISION, A PLAT OF WHICH IS ON FILE IN PLAT BOOK 25, PAGE 154, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, LESS THE FOLLOWING DESCRIBED PARCELS:

PARCEL 1:

COMMENCE AT THE SOUTHEAST CORNER OF SAID LOT 24; THENCE DUE WEST, AN ASSUMED BEARING, ALONG THE SOUTHERLY BOUNDARY OF SAID LOT 24, 58.14 FEET TO A POINT; THENCE DUE NORTH 17.10 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE DUE WEST 48.17 FEET; THENCE N. 48°35'25" WEST, 6.0 FEET; THENCE DUE NORTH 10.0 FEET; THENCE DUE EAST 10.0 FEET; THENCE DUE NORTH 25.67 FEET; THENCE DUE WEST, 2.67 FEET TO A POINT; THENCE DUE NORTH 10.67 FEET; THENCE DUE EAST 18.92 FEET; THENCE SOUTH 45°00'00" EAST, 8.13 FEET; THENCE DUE SOUTH 4.25 FEET TO A POINT; THENCE DUE EAST 20.68 FEET TO A POINT; THENCE DUE SOUTH 40.0 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

COMMENCE AT THE SOUTHEAST CORNER OF SAID LOT 24; THENCE DUE WEST AN ASSUMED BEARING ALONG THE SOUTHERLY BOUNDARY OF SAID LOT 24, 58.14 FEET TO A POINT; THENCE DUE NORTH 64.10 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE DUE WEST 17.55 FEET; THENCE DUE NORTH 26.37 FEET; THENCE DUE EAST 9.00 FEET; THENCE DUE SOUTH 0.37 FEET; THENCE DUE EAST 9.67 FEET; THENCE DUE NORTH 14.00 FEET; THENCE DUE WEST 4.67 FEET; THENCE DUE NORTH 20.0 FEET; THENCE DUE EAST 20.0 FEET TO A POINT; THENCE DUE SOUTH 8.0 FEET; THENCE DUE EAST 24.67 FEET TO A POINT; THENCE DUE NORTH 17.0 FEET; THENCE DUE EAST 10.0 FEET; THENCE DUE NORTH 0.68 FEET; THENCE DUE EAST 10.0 FEET; THENCE DUE NORTH 4.33 FEET; THENCE DUE EAST 10.12 FEET; THENCE DUE NORTH 10.0 FEET; THENCE DUE EAST 10.0 FEET TO A POINT; THENCE DUE SOUTH 52.67 FEET; THENCE DUE WEST 20.12 FEET; THENCE DUE SOUTH 15.0 FEET; THENCE DUE WEST 30.0 FEET; THENCE DUE SOUTH 16.33 FEET; THENCE DUE WEST 31.12 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL.

TERRAQUATIC

SURVEYING AND MAPPING

DRAWING: 1005 RUSSELL DRIVE PERMIT.dwg	DRAWN BY: BL
SCALE: N/A	CHECKED BY: KCJ
DATE: 2/15/22	JOB No.: 21-1205
REV: 2/15/22, ADDED SEAWALL CAP ELEVATIONS	SHEET 1 OF 2

SITE OWNER / ADDRESS  
VILLA DEL ALTO PROP

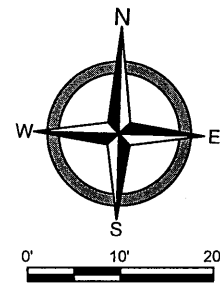
OWNERS

1005 RUSSELL DRIVE  
HIGHLAND BEACH, FL 33487

PREPARED BY:  
TERRAQUATIC, INC

1220 TANGELO TERR, UNIT A12  
DELRAY BEACH, FL 33444  
TELEPHONE: (561) 806-6085

CERTIFICATE OF AUTHORIZATION NO. 7324



HORIZONTAL SCALE: 1" = 20'

POINT A  
NW'LY COR. OF EXST SEAWALL @POC  
X: 960,614.62' Y: 750,605.93'  
N26° 23' 44.456" W80° 04' 11.872"

POINT B  
SW'LY COR. OF EXST. SEAWALL  
X: 960,612.39' Y: 750,525.52'  
N26° 23' 43.660" W80° 04' 11.903"

PB77  
X: 960,507.46  
Y: 751,923.96

JACKSONVILLE TO MIAMI HARBOR 10 FOOT PROJECT  
CONTROL DATA D.O. FILE NUMBER 88-24--258  
300' RIGHT-OF-WAY

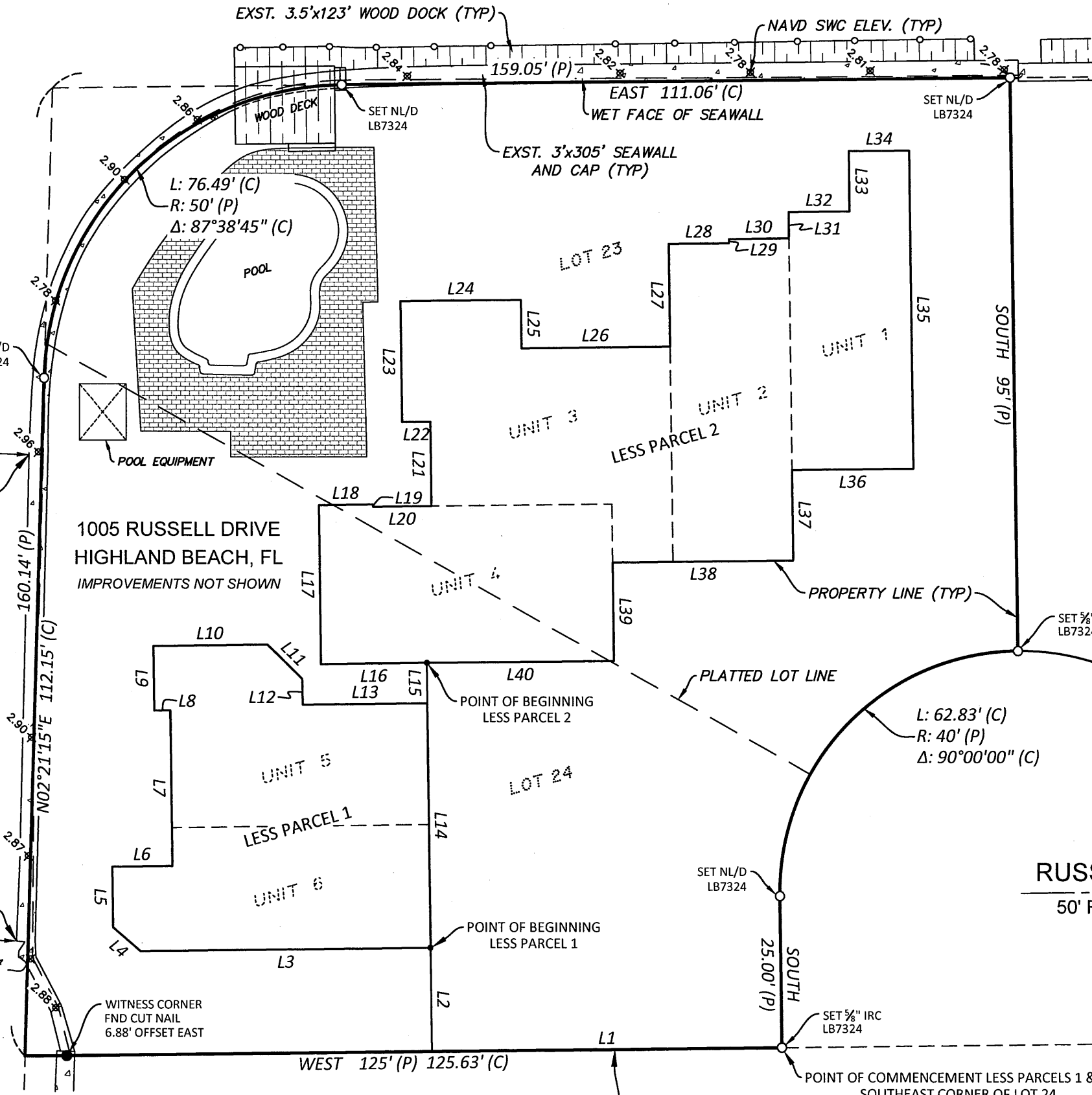
INTRACOASTAL WATERWAY

EAST TOE OF COE 125' NAVIGATION CHANNEL

POINT B

POINT A

SET NL/D  
LB7324



1005 RUSSELL DRIVE  
HIGHLAND BEACH, FL  
IMPROVEMENTS NOT SHOWN

BASIS OF BEARING: SOUTHERLY LINE OF LOT 24  
ASSUMED BEARING OF DUE WEST

POC  
L: 27.73' (C)  
R: 40' (P)  
Δ: 39°42'54" (C)

CENTERLINE  
RUSSELL DRIVE (P)  
50' RIGHT OF WAY (P)

PB78  
X: 960,454.30  
Y: 750,192.55

TERRAQUATIC  
SURVEYING AND MAPPING

SITE OWNER / ADDRESS  
VILLA DEL ALTO PROP  
OWNERS

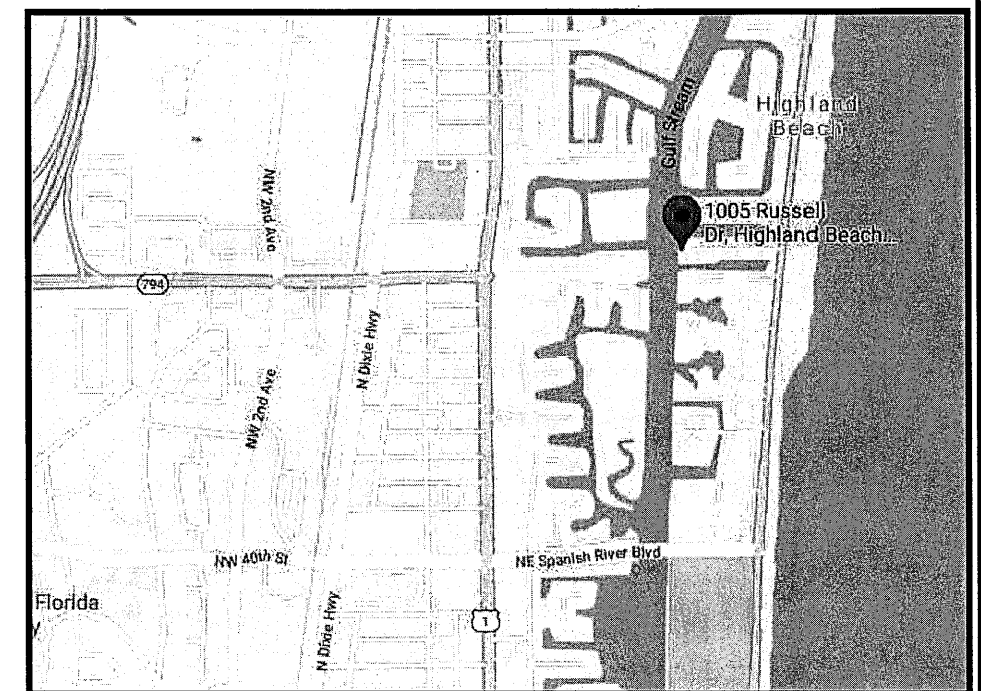
PREPARED BY:  
TERRAQUATIC, INC  
1220 TANGELO TERR, UNIT A12  
DELRAY BEACH, FL 33444  
TELEPHONE: (561) 806-6085  
CERTIFICATE OF AUTHORIZATION NO. 7324

DRAWING: 1005 RUSSELL DRIVE PERMIT.dwg  
SCALE: 1" = 20'  
REV: 2/15/22, ADDED SEAWALL CAP ELEVATIONS

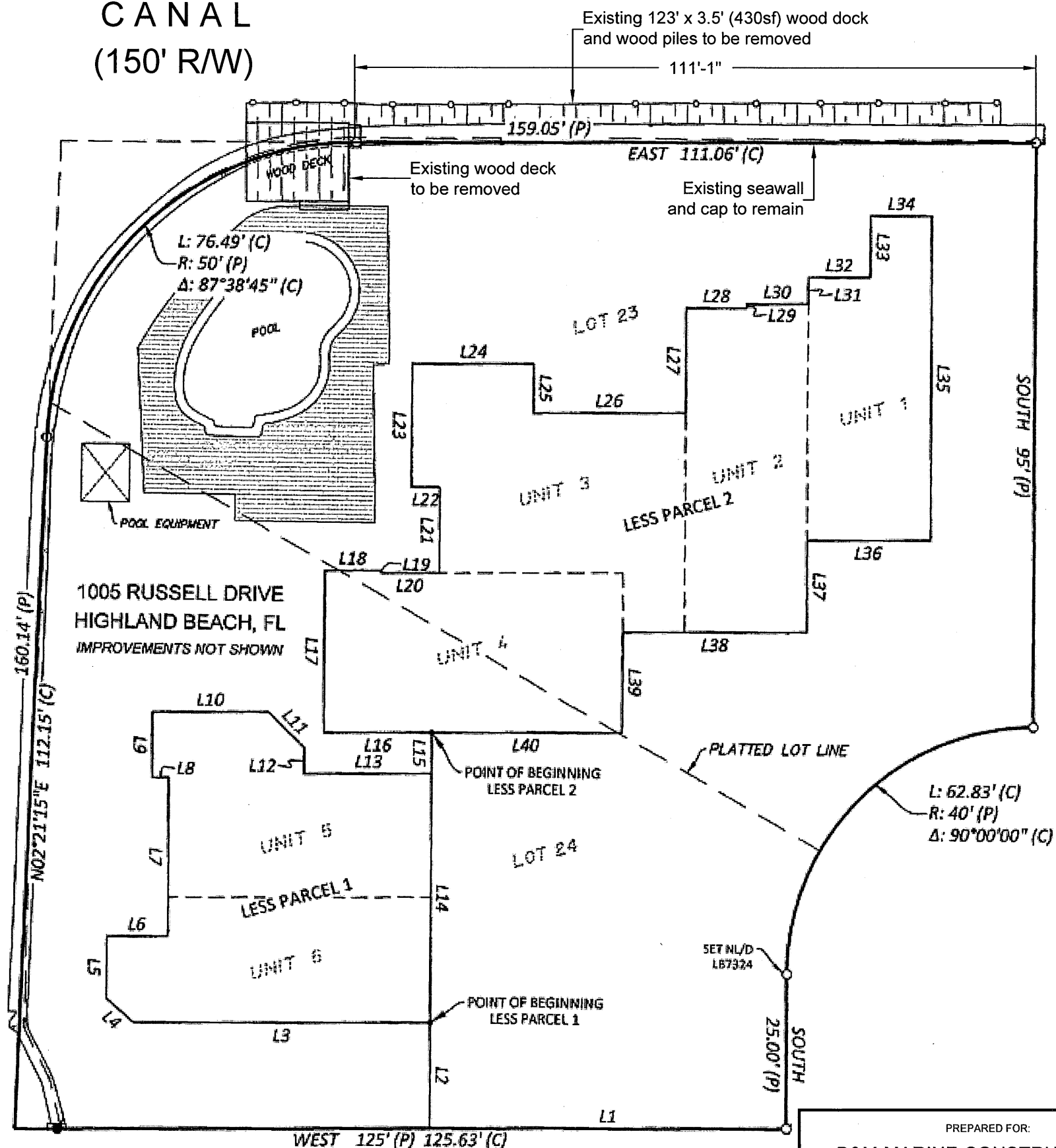
DRAWN BY: BL  
CHECKED BY: KCJ  
JOB No.: 21-1205  
DATE: 2/15/22  
SHEET 2 OF 2

# INTRACOASTAL WATERWAY

**Location Address** 1005 RUSSELL DR 4  
**Municipality** HIGHLAND BEACH  
**Parcel Control Number** 24-43-47-04-03-000-0235  
**Subdivision** HIGHLAND BEACH ISLES IN  
**Official Records Book** 06515 **Page**0122  
**Sale Date** JUL-1990  
**Legal Description** HIGHLAND BEACH ISLES TH PT OF LTS 23 & 24 AS IN  
OR3012P612 K/A UNIT 4 OF VILLA DEL ALTO



## Location Map

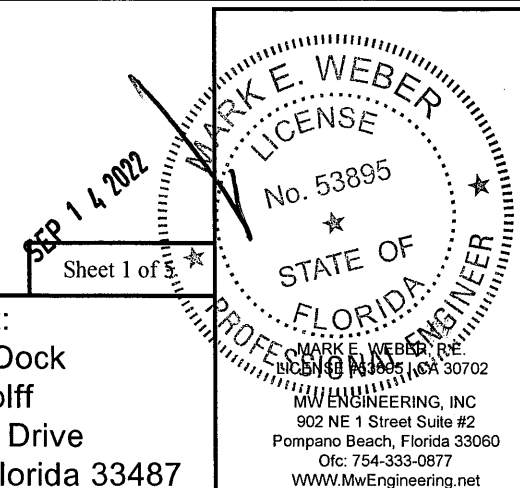


## Existing Site Plan

Scale: 1" = 20'

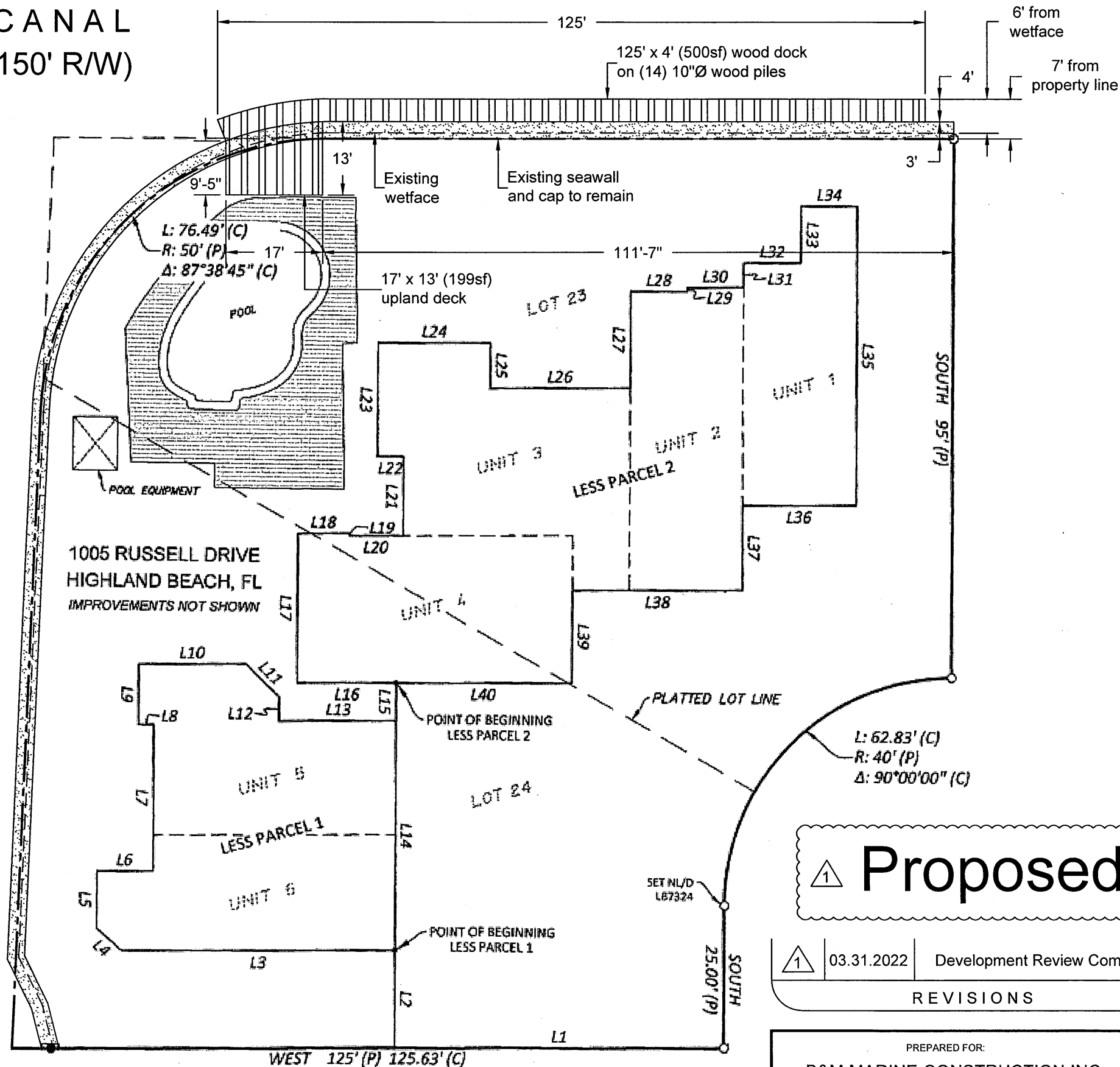
PREPARED FOR:  
B&M MARINE CONSTRUCTION INC  
1211 South Military Trail, Suite 200  
Deerfield Beach, Florida 33442  
(954) 421-1700

Project:  
Proposed Dock  
Jerry Wolff  
1005 Rusell Drive  
Highland Beach, Florida 33487



INTRACOASTAL WATERWAY

CANAL  
(150' R/W)



Proposed Site Plan

Scale: 1" = 20'

1

Proposed

1	03.31.2022	Development Review Comments
REVISIONS		

PREPARED FOR:  
B&M MARINE CONSTRUCTION INC  
1211 South Military Trail, Suite 200  
Deerfield Beach, Florida 33442  
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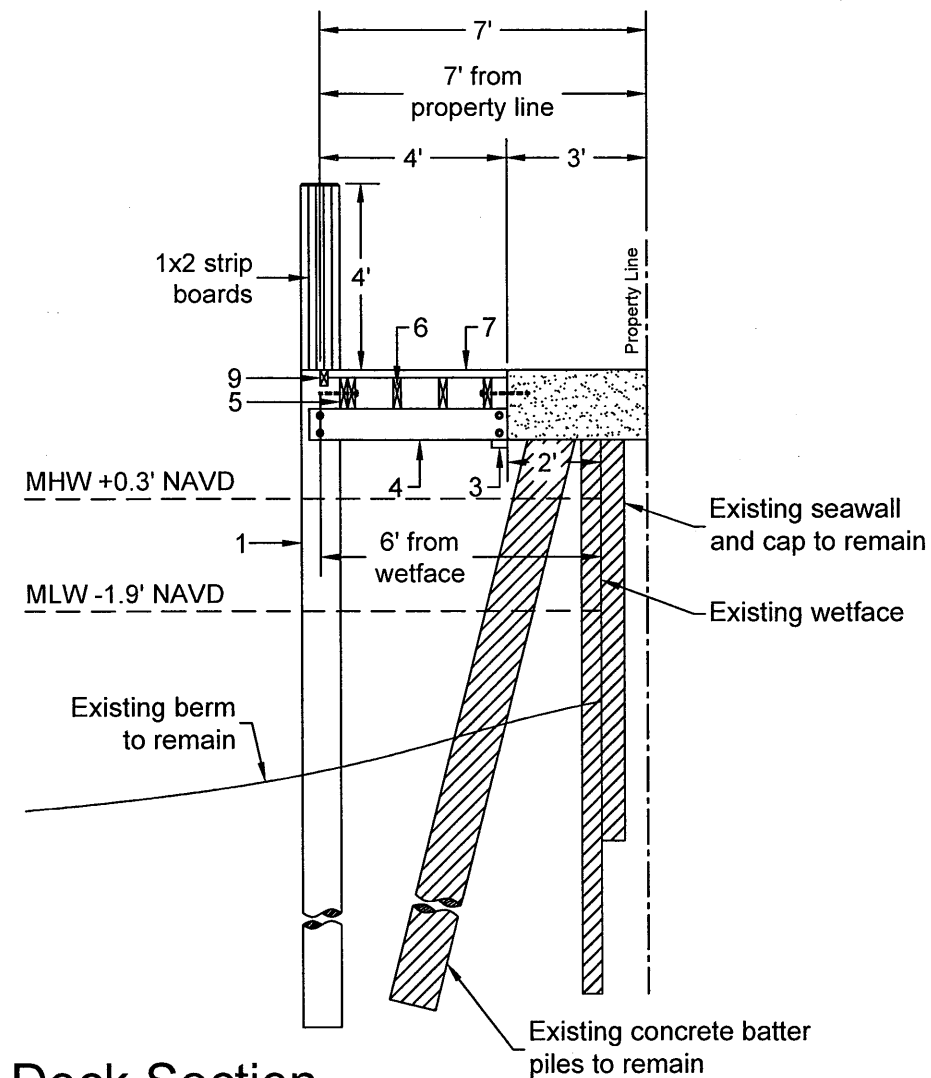
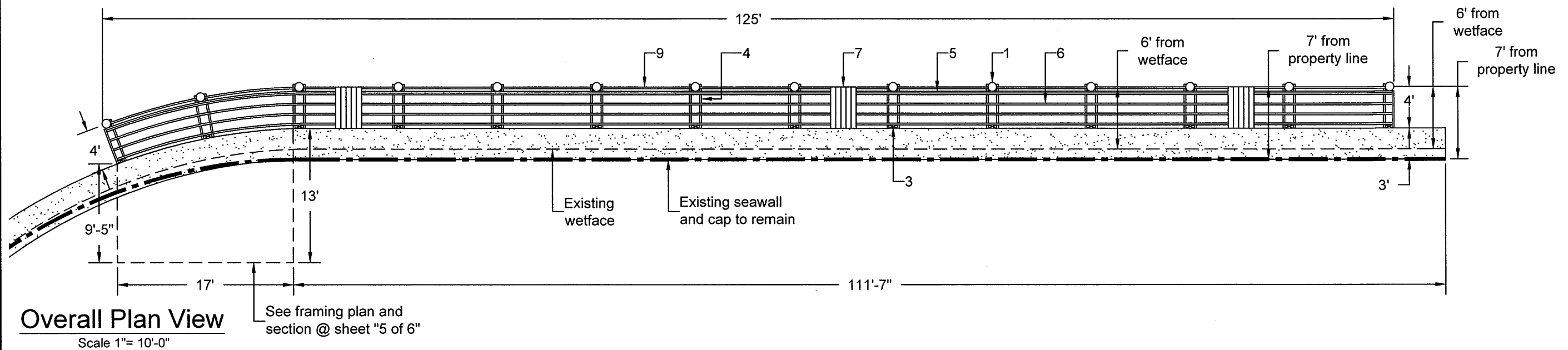
Project:  
Proposed Dock  
Jerry Wolff  
1005 Rusell Drive  
Highland Beach, Florida 33487

SEP 14 2022

Sheet 2 of 5

MARK E. WEBER  
LICENSE  
No. 53895  
STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER

MARK E. WEBER  
MW ENGINEERING, INC  
902 NE 1 Street Suite #2  
Pompano Beach, Florida 33060  
Ofc: 754-333-0877  
WWW.MwEngineering.net



#### DOCK NOTE IDENTIFICATION:

1. New 10"Ø wood piles
2. Not used
3. 4" x 10" hanger to existing cap with (1) 5/8" wedge anchor, min. 4" embedment
4. 2" x 8" substringer with (2) 5/8" thru bolt or lag bolt @ piles and hangers
5. (2) 2" x 8" stringers @ pilings with (1) 5/8" thru bolt or lag bolt to piles
6. 2" x 8" stringers w/ (2) 16d nails to each substringer; @ 16"o.c. for azek deckboards or 24"o.c. for pressure treated wood deckboards
7. 5/4" x 6" Tan deck "HDPE" with (2) #8 x 3" deck screws per stringer
8. 2" x 8" fascia board
9. 2" x 4" wood trim
10. 2x4 continuous sleepers with 1/2"Ø wedge anchors @ 36" o.c. into existing seawall cap, min. 4" embedment
11. 4x4 posts set in 18"Ø x 24" deep earth formed with redi mix type concrete
12. 2" x 6" joists with (1) 5/8" thru bolt or lag bolt @ 4x4 posts
13. 2" x 6" substringers with (1) 1/2" thru bolt @ 4x4 posts

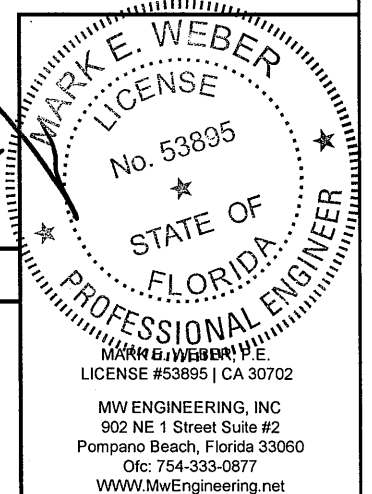
**Proposed**

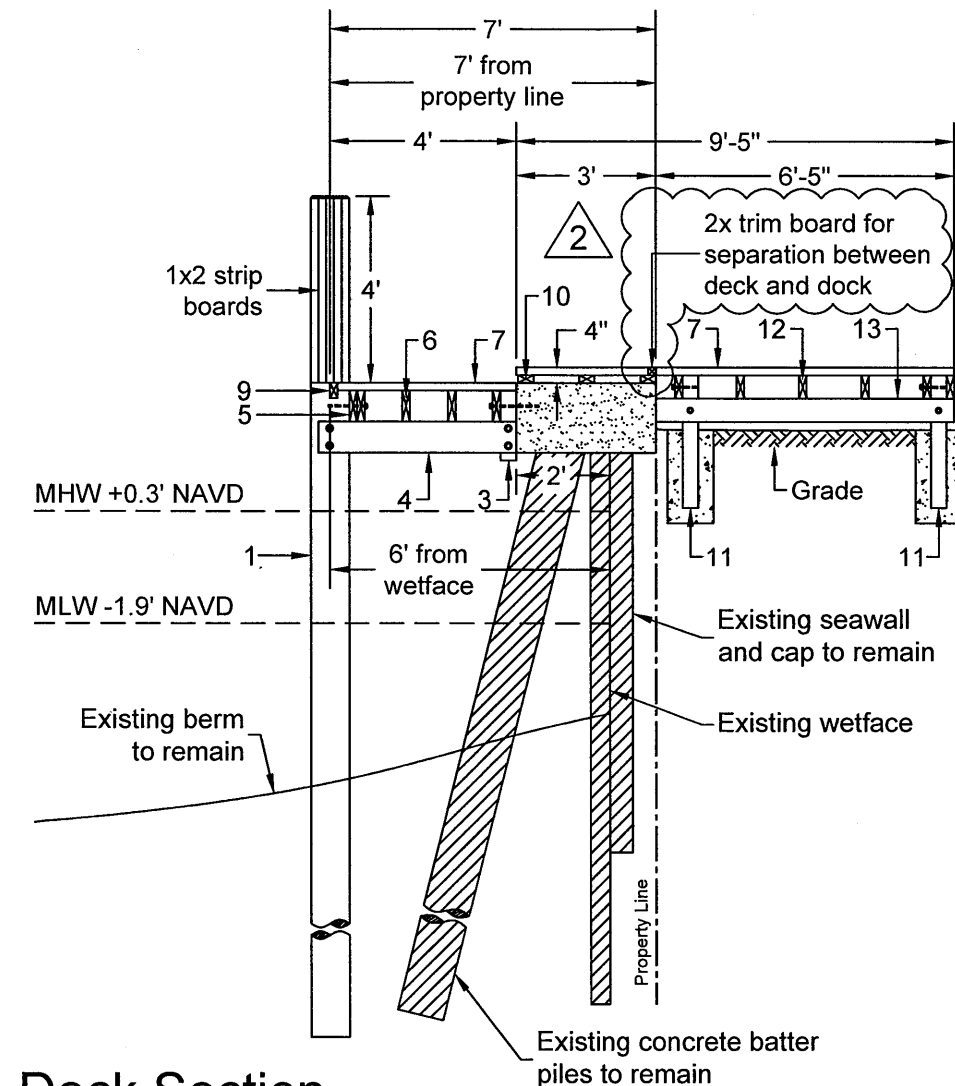
1	03.31.2022	Development Review Comments
REVISIONS		

Sheet 3 of 5

PREPARED FOR:  
B&M MARINE CONSTRUCTION INC  
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Deerfield Beach, Florida 33442  
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Project:  
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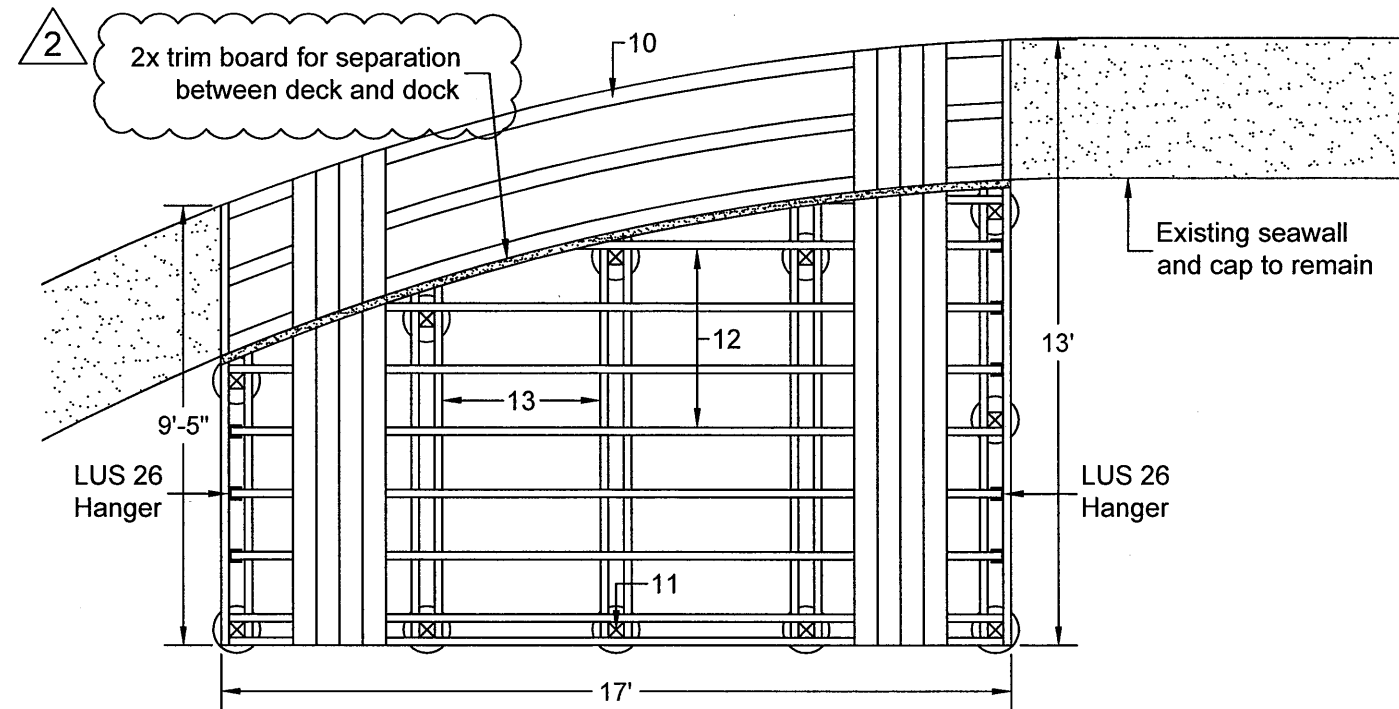
## Deck Section

Scale 1/4"= 1'-0"

**Proposed**

2	08.26.2022	Development Review Comments
1	03.31.2022	Development Review Comments

REVISIONS



## Deck Framing Plan

Scale 1/4"= 1'-0"

### DOCK NOTE IDENTIFICATION:

1. New 10"Ø wood piles
2. Not used
3. 4" x 10" hanger to existing cap with (1) 5/8" wedge anchor, min. 4" embedment
4. 2" x 8" substringer with (2) 5/8" thru bolt or lag bolt @ piles and hangers
5. (2) 2" x 8" stringers @ pilings with (1) 5/8" thru bolt or lag bolt to piles
6. 2" x 8" stringers w/ (2) 16d nails to each substringer; @ 16"o.c. for azek deckboards or 24"o.c. for pressure treated wood deckboards
7. 5/4" x 6" Tan deck "HDPE" with (2) #8 x 3" deck screws per stringer
8. 2" x 8" fascia board
9. 2" x 4" wood trim
10. 2x4 continuous sleepers with 1/2"Ø wedge anchors @ 36" o.c. into existing seawall cap, min. 4" embedment
11. 4x4 posts set in 18"Ø x 24" deep earth formed with redi mix type concrete
12. 2" x 6" joists with (1) 5/8" thru bolt or lag bolt @ 4x4 posts
13. 2" x 6" substringers with (1) 1/2" thru bolt @ 4x4 posts

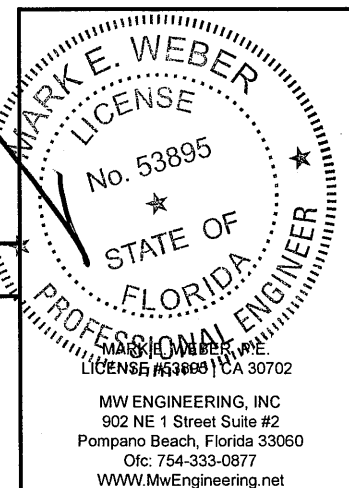
PREPARED FOR:

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Proposed Dock  
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SEP 14 2022  
Sheet 4 of 5





GENERAL NOTES:

- 1. Construction to follow the Florida Building Code 7th Edition (2020) and amendments as applicable and all Local, State and Federal Laws.
- 2. Licensed contractor shall verify the existing conditions prior to the commencement of the work. Any conflicts or omissions between existing conditions or the various elements of the working drawing shall be brought to the attention of the Engineer prior to the commencement of the work. The Licensed Contractor and all subcontractors are responsible for all lines, elevations, and measurements in connection with their work.
- 3. Do not scale drawings for dimensions.
- 4. Any deviation and/or substitution from the information provided herein shall be submitted to the Engineer for approval prior to commencement of work.
- 5. All unanticipated or unforeseen demolition and/or new construction conditions which require deviation from the plans and notes herein shall be reported to the Engineer prior to commencement of work.
- 6. All new work and/or materials shall conform to all requirements of each administrative body having jurisdiction in each appertaining circumstance.
- 7. All new materials and/or patchwork shall be provided to match existing materials and/or adjoining work where practical except as specifically noted herein.
- 8. Licensed Contractor to shall use all possible care to protect all existing materials, surfaces, and furnishings from damage during all phases of construction.
- 9. Licensed Contractor to verify location of existing utilities prior to commencing work.
- 10. The Licensed contractor to install and remove all shoring and bracing as required for the proper execution of the work.
- 11. Licensed Contractor to obtain all permits as necessary from all Local, State, and Federal agencies.
- 12. Turbidity barriers to be marked with site contractor's company name using permanent markings no smaller than 3 inches in height on the top of the barrier.

PILE DRIVING:

- 1. Piles shall be driven using an approved cushion block consisting of material so arranged so as to provide the transmission of hammer energy.
- 2. Piles shall be driven to required capacity (min. 10 tons) a minimum of 8' into berm or refusal.
- 3. Piles shall be driven with a drop hammer or gravity hammer provided the hammer shall weight no less than 3,000 pounds, and the fall of the hammer shall not exceed 6'.
- 4. Piles shall be driven with a variation of not more than 1/4 inch per foot from the vertical, or from the batter line indicated, with a maximum variation of the head of the pile from the position shown on the plans of not more than three inches.
- 5. Where piling must penetrate strata offering high resistance to driving, the structural engineer of record or special inspector may require that the piles be set in pre-drilled or punched holes. The piles shall reach their final penetration by driving.

CONCRETE NOTES:

- 1. Concrete shall conform to ACI 318-14 and shall be regular weight, sulfate resistant, with a design strength of 5000 psi at 28 days with a maximum water-cementitious materials ratio, by weight aggregate concrete of 0.40.
- 2. Owner shall employ and pay for testing services from an independent testing laboratory for concrete sampling and testing in accordance with ASTM.
- 3. Licensed contractor is responsible for the adequacy of forms and shoring and for safe practice in their use and removal.
- 4. Concrete cover shall be 3" unless otherwise noted on the approved drawings.
- 5. Reinforcing steel shall be in conformance with the latest version of ASTM A615 Grade 60 specifications. All reinforcement shall be placed in accordance with ACI 315 and ACI Manual of Standard Practice.
- 6. Splices in reinforcing bars shall be not be less than 48 bar diameters and reinforcing shall be continuous around all corners and changes in direction. Continuity shall be provided at corners or changes in direction by bending the longitudinal steel around the corner 48 bar diameters.
- 7. Defective, cracked or loose concrete areas must be cut out, the rebar must be cleaned, coated with zinc and repaired with at least 3" of expoxy-concrete mix or gunnite concrete with sulfate-resistant cement.

PILE NOTES:

- 1. Wood piles to be 2.5 lb. CCA treated in accordance with AWWA standard C18.
- 2. Wood piles shall be a minimum diameter of 10", Miami Dade County requires minimum diameter of 12".
- 3. Concrete piles shall attain 6000 psi compressive strength in 28 days.
- 4. Concrete piles shall be reinforced with four - 7/16"Ø lo-lax strands, 270 kips, and 5 ga. spiral ties.
- 5. Concrete piles shall be 12"x12" square, minimum length of 20'.
- 6. Concrete piles shall be cut to leave strands exposed a min. of 18" and tied to dock or cap steel or drill and epoxy (2) #5 8"x12" hook bars 6" into pile.

WOOD DOCK NOTES:

- 1. All materials to be pressure treated pine unless otherwise noted.
- 2. All frame work materials to be Southern Pine Grade #1
- 3. All Decking materials to be grade #1 unless otherwise noted.
- 4. All hardware to be Stainless Steel or Galvanized unless otherwise noted.

<p>PREPARED FOR:</p> <p><b>B&amp;M MARINE CONSTRUCTION INC</b> 1211 South Military Trail,Suite 200 Deerfield Beach, Florida 33442 (954) 421-1700</p>	<p>Project:</p> <p><b>Proposed Dock</b> <b>Jerry Wolff</b> <b>1005 Rusell Drive</b> <b>Highland Beach, Florida 33487</b></p>	<p>SEP 14 2022</p> <p>Sheet 5 of 5</p> <p><b>MARK E. WEBER</b> LICENSE No. 53895 STATE OF FLORIDA PROFESSIONAL ENGINEER</p> <p>MARK E. WEBER, P.E. LICENSE #53895   CA 30702</p> <p>MW ENGINEERING, INC 902 NE 1 Street Suite #2 Pompano Beach, Florida 33060 Ofc: 754-333-0877 WWW.MwEngineering.net</p>
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