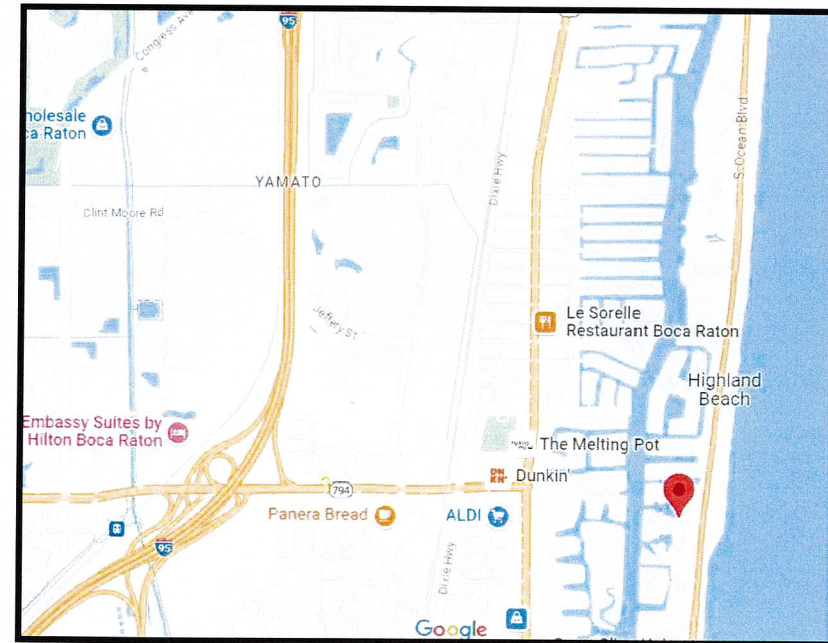
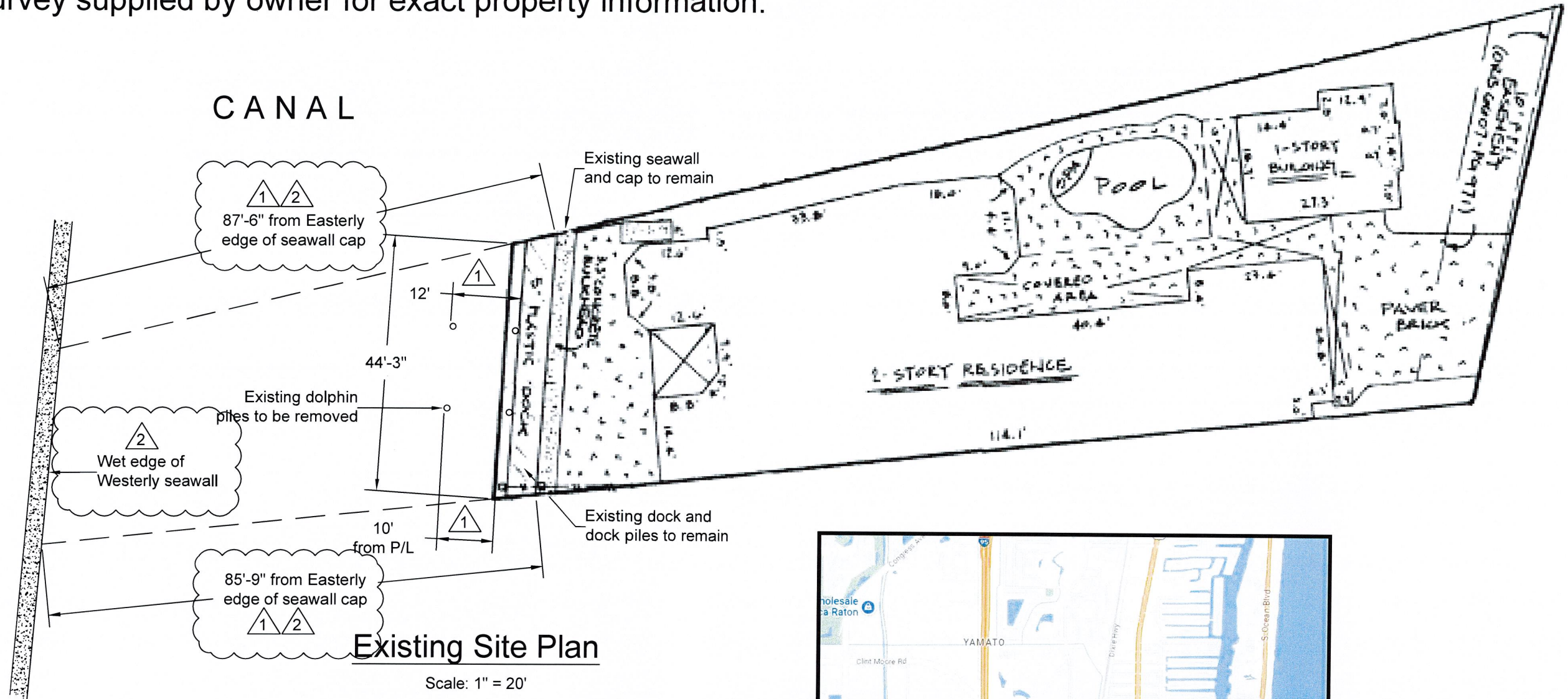


See attached survey supplied by owner for exact property information.

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HIGHLAND BEACH
BUILDING DEPARTMENT



Property Detail

Location Address 1002 GRAND CT
Municipality HIGHLAND BEACH
Parcel Control Number 24-43-47-09-00-002-0140
Subdivision
Official Records Book 32018 Page 323
Sale Date DEC-2020
Legal Description 9-47-43, TH PT OF N 1/2 OF GOVLT 2 K/A LT 2 OF UNREC GRAND CAY ESTS

Owner Information

Owners WALSH CAMRON M
Mailing address 1002 GRAND CT
BOCA RATON FL 33487 5306

REVISIONS	DATE	CITY COMMENTS
2	02-14-2024	
1	12-14-2023	Corrections per DO23-0015 Deficiency Notice

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

Project:
Proposed Boat Lift
Camron Walsh
1002 Grand Court
Highland Beach, Florida 33487

MARK E. WEBER
LICENSE #53895
STATE OF FLORIDA
PROFESSIONAL ENGINEER
MAR 12 2024
MARK E. WEBER, P.E.
LICENSE #53895 | CA 30702
MW ENGINEERING, INC
902 NE 1 Street Suite #2
Pompano Beach, Florida 33060
Ofc: 754-333-0877
WWW.MwEngineering.net

Sheet 1 of 7

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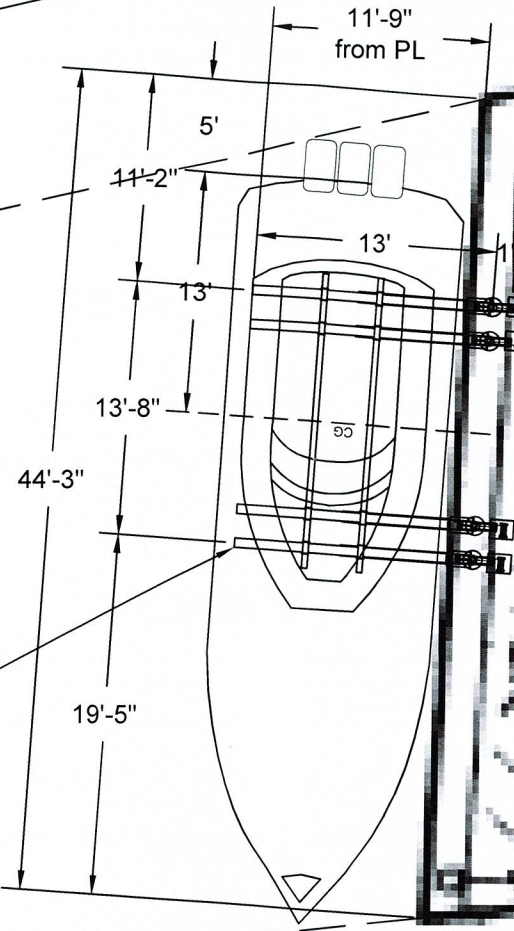
HIGHLAND BEACH
BUILDING DEPARTMENT

Existing seawall
and cap to remain

87'-6" from Easterly
edge of seawall cap



11'-9"
from PL



CANAL

Wet edge of
Westerly seawall



Proposed Neptune 27,000lb
4-track boat lift on (4) new
12"Ø wood piles

85'-9" from Easterly
edge of seawall cap



Existing dock and
dock piles to remain

Proposed Site Plan

Scale: 1" = 10'

Scope of Work:

1. Existing wood dock and wood piles to remain
2. Existing boat lift and boat lift piles to be removed
3. Install 27,000lb 4-track boat lift on (4) 12"Ø wood piles

2	02-14-2024	City Comments
1	12-14-2023	Corrections per DO23-0015 Deficiency Notice
REVISIONS		

Sheet 2 of 7

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 1211 South Military Trail, Suite 200
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Project:
Proposed Boat Lift
 Camron Walsh
 1002 Grand Court
 Highland Beach, Florida 33487

Professional Engineer Seal for Mark E. Weber, License No. 53895, State of Florida. Includes contact information for MW Engineering, Inc. (902 NE 1 Street Suite #2, Pompano Beach, Florida 33060, Ofc: 754-333-0877, WWW.MwEngineering.net).

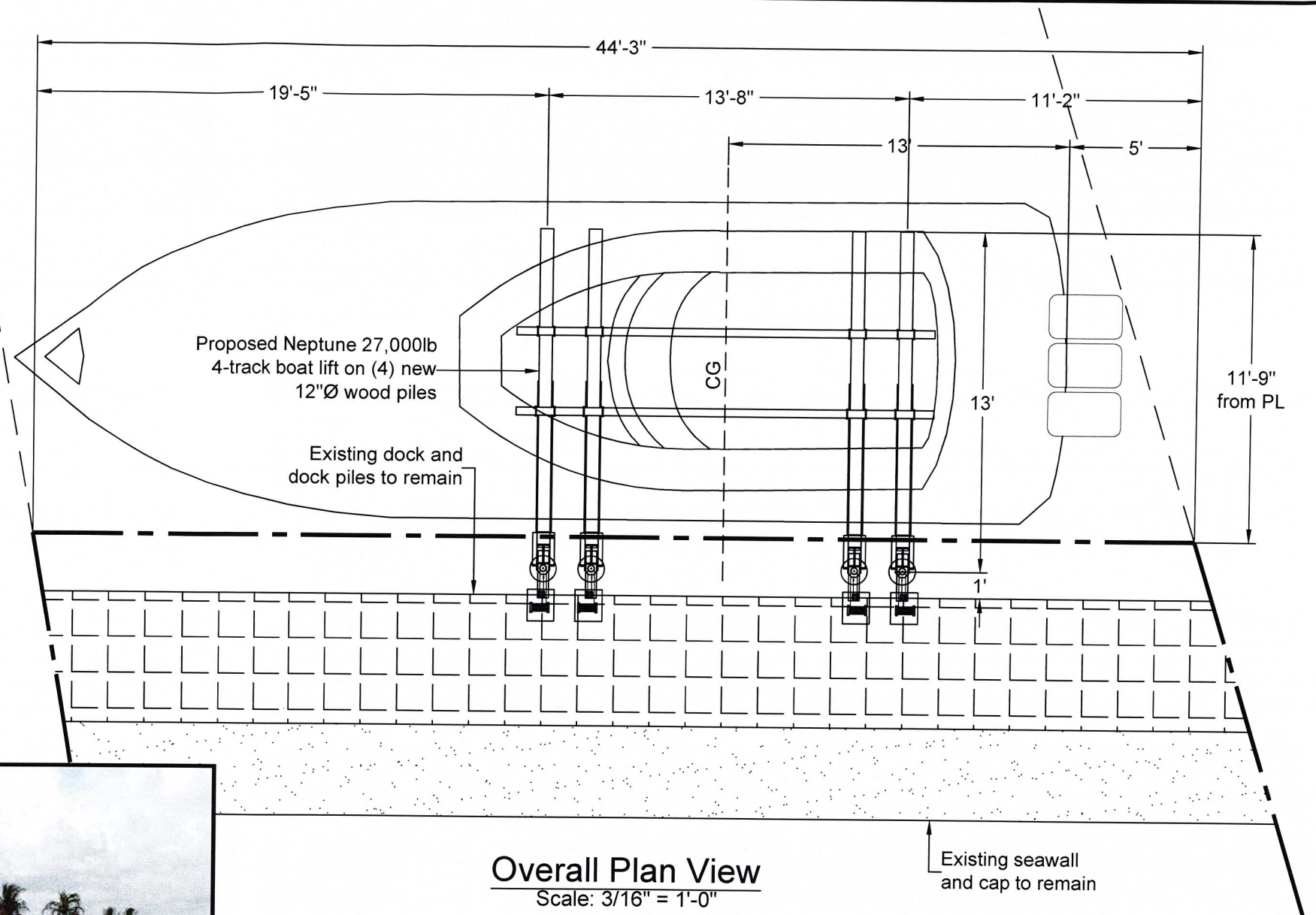
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1	12-14-2023	Corrections per DO23-0015 Deficiency Notice

REVISIONS

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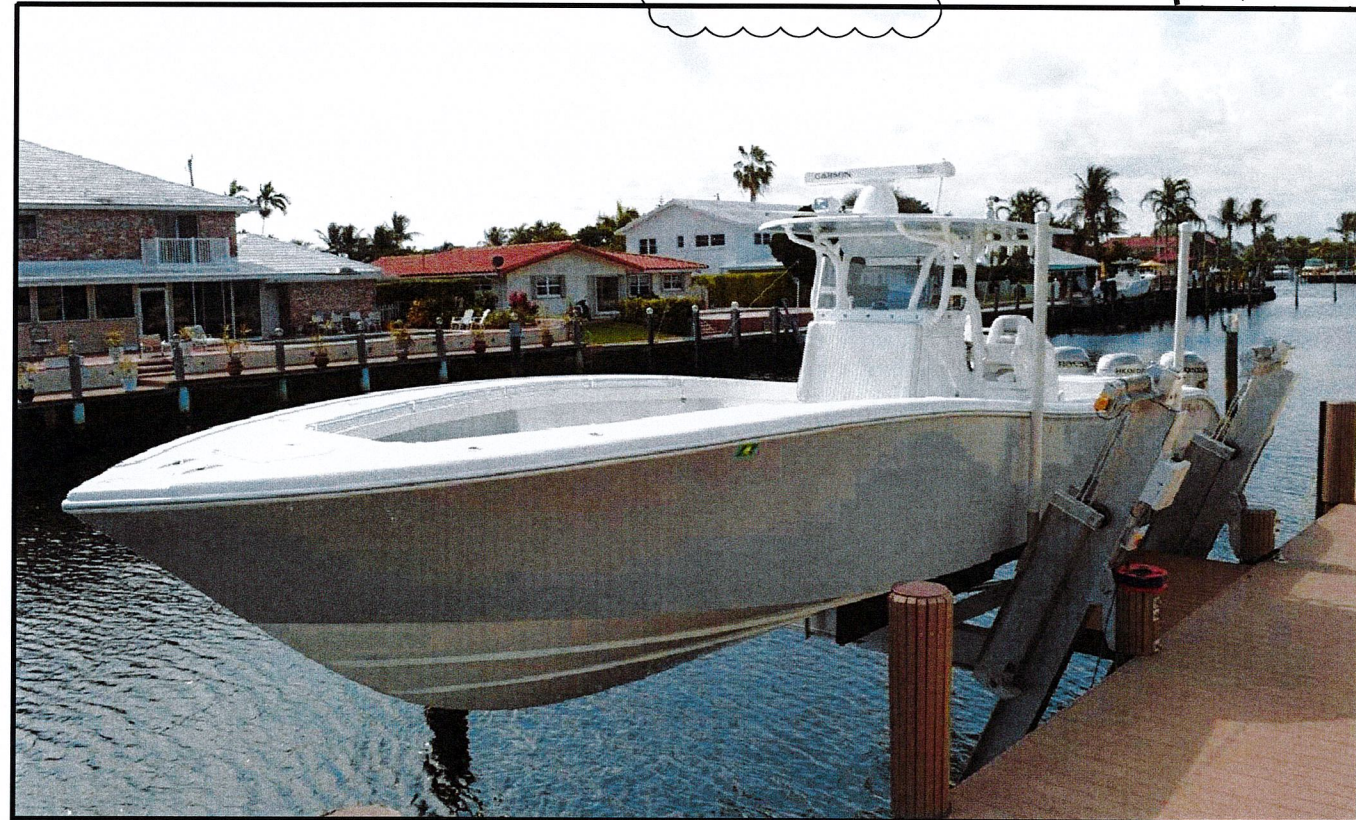
MAR 15 2024

HIGHLAND BEACH
BUILDING DEPARTMENT



2

For Illustrative Purposes - Boat may Change



Sheet 3 of 7

PREPARED FOR:
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Proposed Boat Lift
 Camron Walsh
 1002 Grand Court
 Highland Beach, Florida 33487

MAR 12 2024
 MW ENGINEERING, INC
 902 NE 1 Street Suite #2
 Pompano Beach, Florida 33060
 Ofc: 754-333-0877
 WWW.MwEngineering.net

BOAT KEEL NOTE:

Boat Keel to be a maximum of one foot above the minimum seawall elevation when lifted.

Boat lift means the bottom of the keel of any boat shall not be hoisted greater than one foot above the minimum seawall elevation.

In no case shall the lift be higher than the superstructure of the boat when lifted.

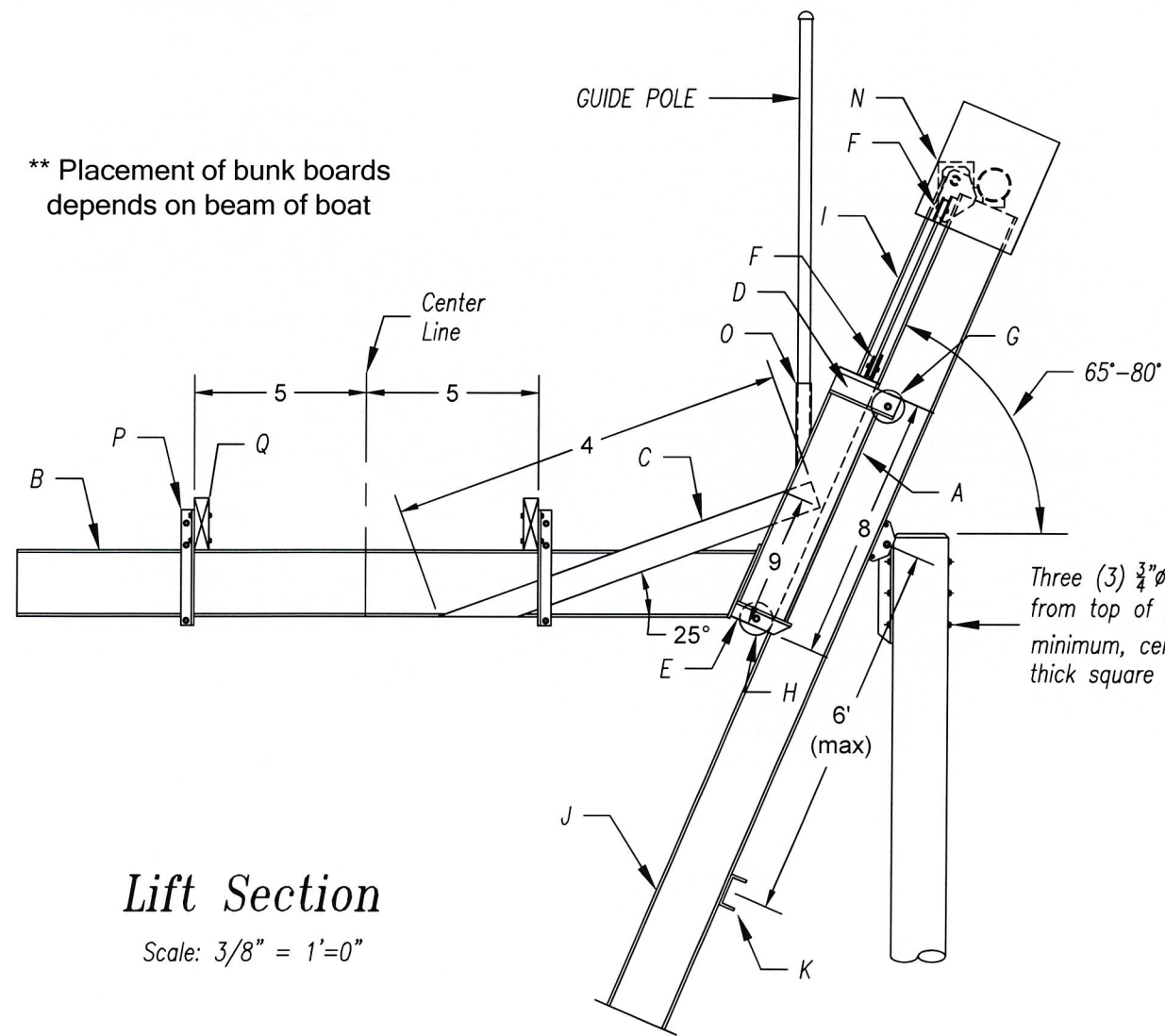
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 HIGHLAND BEACH
 BUILDING DEPARTMENT

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MAR 15 2024

HIGHLAND BEACH
 BUILDING DEPARTMENT

** Placement of bunk boards depends on beam of boat



Lift Section

Scale: 3/8" = 1'-0"

Proposed Neptune 27,000lb
 4-track boat lift on (4) new
 12"Ø wood piles

MHW +0.3' NAVD

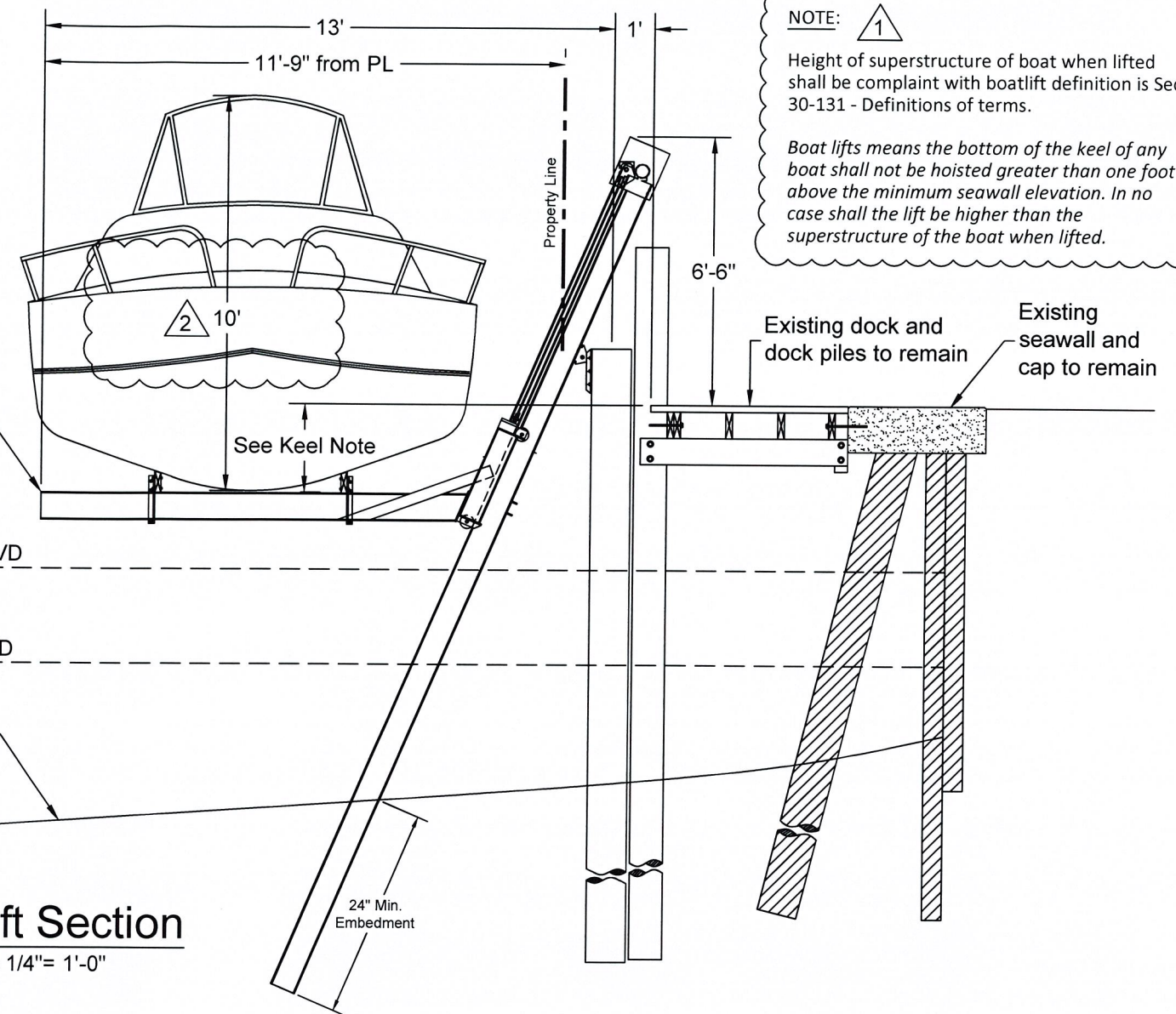
MLW -1.9' NAVD

Existing berm
 to remain

Boat Lift Section

Scale 1/4" = 1'-0"

Three (3) 3/4"Ø thru bolts, 3 1/2"
 from top of pile, 3" apart
 minimum, centered with 3"x3"x1/4"
 thick square washers



NOTE: 1
 Height of superstructure of boat when lifted shall be compliant with boatlift definition in Sec. 30-131 - Definitions of terms.
 Boat lifts means the bottom of the keel of any boat shall not be hoisted greater than one foot above the minimum seawall elevation. In no case shall the lift be higher than the superstructure of the boat when lifted.

Revision No.	Date	Description
2	02-14-2024	City Comments
1	12-14-2023	Corrections per DO23-0015 Deficiency Notice

REVISIONS

Sheet 4 of 5

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

Project:
Proposed Boat Lift
Camron Walsh
 1002 Grand Court
 Highland Beach, Florida 33487

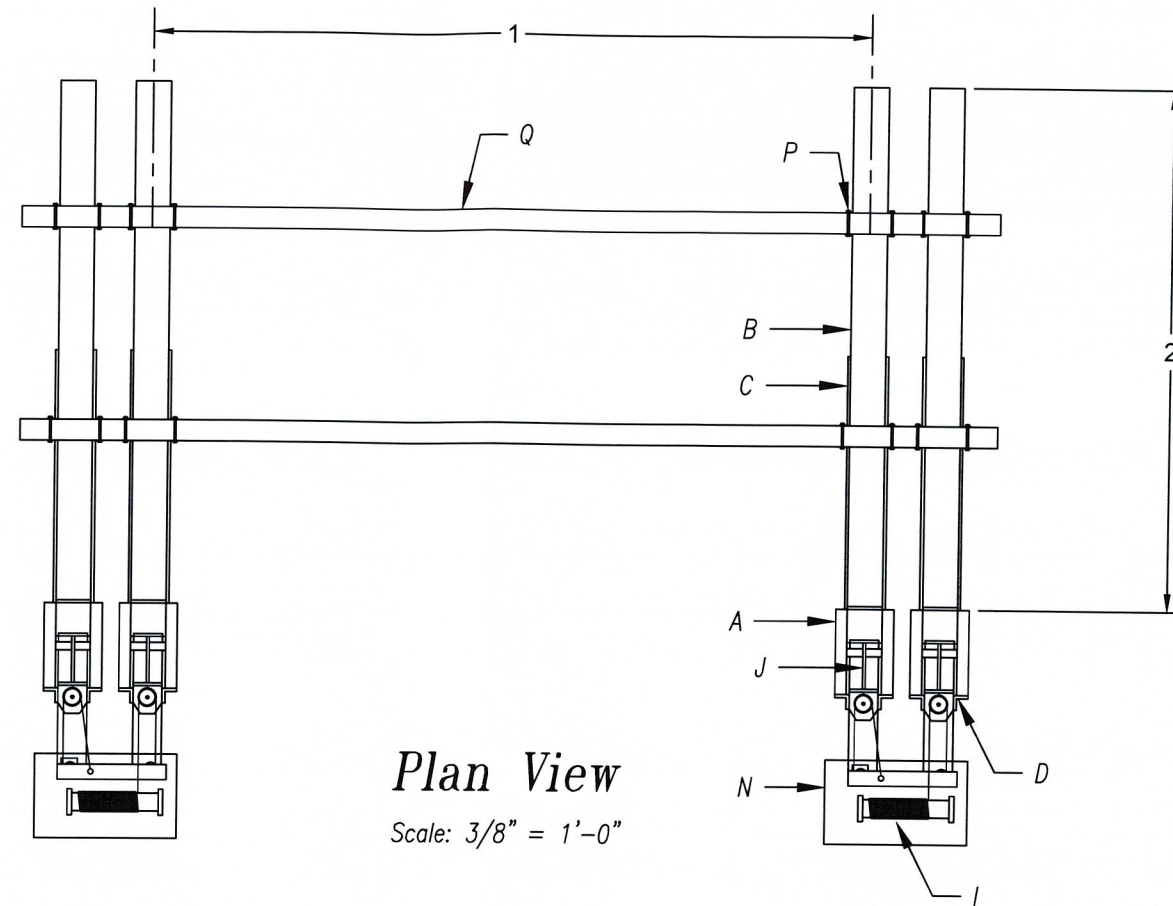
MARK E. WEBER
 LICENSE #53895
 No. 53895
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

MARK E. WEBER, P.E.
 LICENSE #53895 | CA 30702
 MW ENGINEERING, INC
 902 NE 1 Street Suite #2
 Pompano Beach, Florida 33060
 Ofc: 754-333-0877
 WWW.MwEngineering.net

Components

	Lift Capacity (In Pounds)	27,000
A	Carriage Boom (2 Required per Lift Arm)	AS C 10"x5.3x50"
B	Cradle Arm	AA I 10"x10.286
C	Gusset Plate (2 Required per Lift Arm)	1/2"x5" Flat Bar
D	Upper Carriage Angle (2 Required per Lift Arm)	3/8"x3"x4" Angle
E	Lower Carriage Angle (2 Required per Lift Arm)	3/8"x3"x4" Angle
F	Pulley Plate (2 Required per Lift Arm)	1/2"x7" Flat Bar
G	Upper Guide Wheel (4 Required per Lift Arm)	6" Diameter
H	Lower Guide Wheel (1 Required per Lift Arm)	6" Diameter
I	Cable Size (Stainless Steel)	7/16" Diameter 7x19 SS 304
J	Guide Track	AA I 10"x10.286
K	Guide Track To Guide Track Brace	AA CS 6"x2.8
L	Attachment Bracket	(2) 3/8"x3"x3" Angles with welded 1/2" Thick Inner Plate
M	Track Mount Connector (2 Required per Lift Arm)	3/8"x3"x4" Angle & 3/4" Bolts
N	Motor Size (Horse Power/Voltage)	Aluminum Housing
O	Guide Post Socket	3" Diameter Schedule 80 Pipe
P	Bunk Bracket Support (2 Each Side of Lift Arm)	1/4"x2"x2"
Q	Bunk Boards**	3"x12" Pressure Treated Southern Yellow Pine #1

** Placement of bunk boards depends on beam of boat



Plan View

Scale: 3/8" = 1'-0"

Dimensions		
Lift Capacity (In Pounds)		27,000
Dimension Mark	1	10'
	2	10'
	3	-
	4	5'
	5**	1'-6"
	6	-
	7	-
	8	58"
	9	28"

** Placement of bunk boards depends on beam of boat

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HIGHLAND BEACH
BUILDING DEPARTMENT

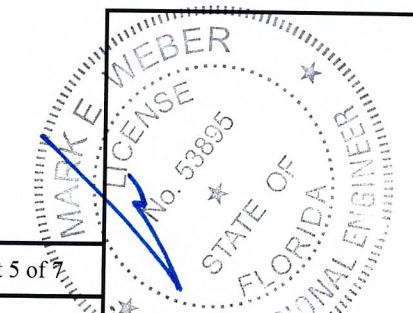
Sheet 5 of 7

PREPARED FOR:

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

Project:

Proposed Boat Lift
Camron Walsh
1002 Grand Court
Highland Beach, Florida 33487



MARK E. WEBER, P.E.
LICENSE #53895 | CA 30702
MW ENGINEERING, INC
902 NE 1 Street Suite #2
Pompano Beach, Florida 33060
Ofc: 754-333-0877
WWW.MwEngineering.net

GENERAL NOTES:

1. Construction to follow the Florida Building Code 8th Edition (2023) 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 a minimum allowable bearing capacity of 10 tons for wood, 25 tons for concrete, and 5 tons for pin piles, 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 $\frac{1}{4}$ 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.

PILE NOTES:

1. Wood piles to be 2.5 lb. CCA treated in accordance with AWPA standard C18.
2. Wood piles shall be a minimum diameter of 10", Miami Dade County requires minimum diameter of 12".

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.

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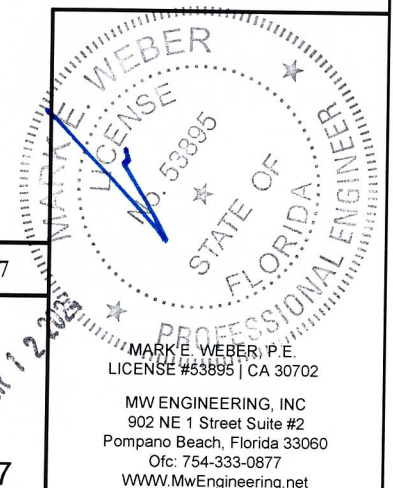
MAR 15 2024

HIGHLAND BEACH
BUILDING DEPARTMENT

Sheet 6 of 7

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

Project:
Proposed Boat Lift
Camron Walsh
1002 Grand Court
Highland Beach, Florida 33487



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LICENSE #53895 | CA 30702
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902 NE 1 Street Suite #2
Pompano Beach, Florida 33060
Ofc: 754-333-0877
WWW.MwEngineering.net

Boat Lift Notes:

- Design in accordance with Florida Building Code, 8th Edition (2023).
- This lifting structure has been designed to withstand wind loads associated with speeds of $V (ult) = 180$ MPH, (3 Second Gust) Exposure 'D' without a boat on the lift per ASCE 7-16 using above ground sign/wall method. The lifting structure including boat has been designed to withstand wind speeds of $V (sustained) = 73$ MPH, remove boat when winds approach this speed or for any named storm event. Boat shall not be stored on lift during high wind events.
- Do not scale drawings for dimensions. Licensed Contractor to verify location of existing utilities prior to commencing work. The Licensed contractor shall install and remove all shoring and bracing as required for the proper installation of the work. Licensed Contractor to obtain all permits as necessary from all Local, State, and Federal agencies.
- Aluminum: Material 6061 T6 Aluminum, all welds are minimum full fillet weld using 5556 filler 1/4 full fillet weld using 5556 filler alloy, all welding must conform to AISC steel construction manual currently adopted edition as inspected and verified by others. The contractor is responsible for insulating aluminum members from dissimilar metals to prevent electrolysis. Aluminum members in contact with concrete and wood shall be protected by "Koppers Bituminous Paint" or Polyethylene Tape UHMW (ultra-high molecular weight). 11.7 mils (0.30 mm) min. total thickness in accordance with current Florida Building Code.
- All anchors to be Hilti Brand or Approved Equal. All bolts shall be hot dipped galvanized or stainless steel & meet the requirements of ASTM A304 with hardened washers and hex nuts. Washers shall be used between wood & bolt head & between wood & nut. Where generic fasteners are labeled, capacities shall be equal to or greater than Hilti Kwik Bolt II or Red Head thru bolts SAE Grade 5 or better. Embedment depths specified herein are depths into solid substrate and do not include thickness of other finishes.
- MW Engineering Inc. 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. Use of this specification by contractor and permit holder Et al. indemnifies and saves harmless the engineer for all costs and damages from material fabrication, system erection, and construction practices beyond that which is called for by codes and from deviations from this design. Intellectual property of MW Engineering, Inc. All rights reserved. No part of this publication may be reproduced without prior written authorization.
- Piles shall be driven to minimum allowable bearing capacity of 10 tons minimum 8-foot or refusal and sufficiently penetrated sand or rock strata in pre-drilled or punched holes to support lift capacity, weight and loads. Each pile to carry commensurate load (Factor of Safety of 2). Sub-surface conditions can vary greatly.
- The contractor of record shall verify pile type, installation, and driving in compliance with FBC 8th ED (2023). Wood piles shall be a minimum diameter of 10", Miami Dade County requires minimum diameter of 12", 2.5 lb. CCA treated in accordance with AWWPA standard C18. Concrete piles shall be 12" x 12" square, attain 6000 psi compressive strength in 28 days and shall be reinforced with four - 7/16" diameter lo-lax strands, 270 kips, and 5 ga. spiral ties.
- Pilings described herein are considered to be part of the host structure and are not part of this certification. The pilings and existing host structure, if any, must be capable of supporting the loaded system as verified by the permit holder and contractor of record. No warranty, either express or implied is contained herein.

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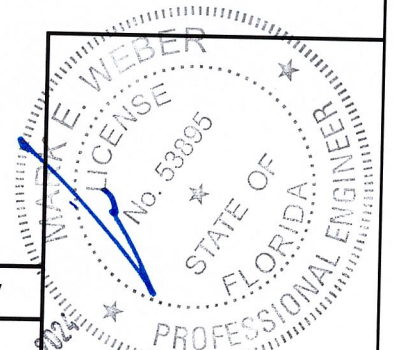
HIGHLAND BEACH
BUILDING DEPARTMENT

Sheet 7 of 7

PREPARED FOR:

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Deerfield Beach, Florida 33442
(954) 421-1700

Project:
Proposed Boat Lift
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1002 Grand Court
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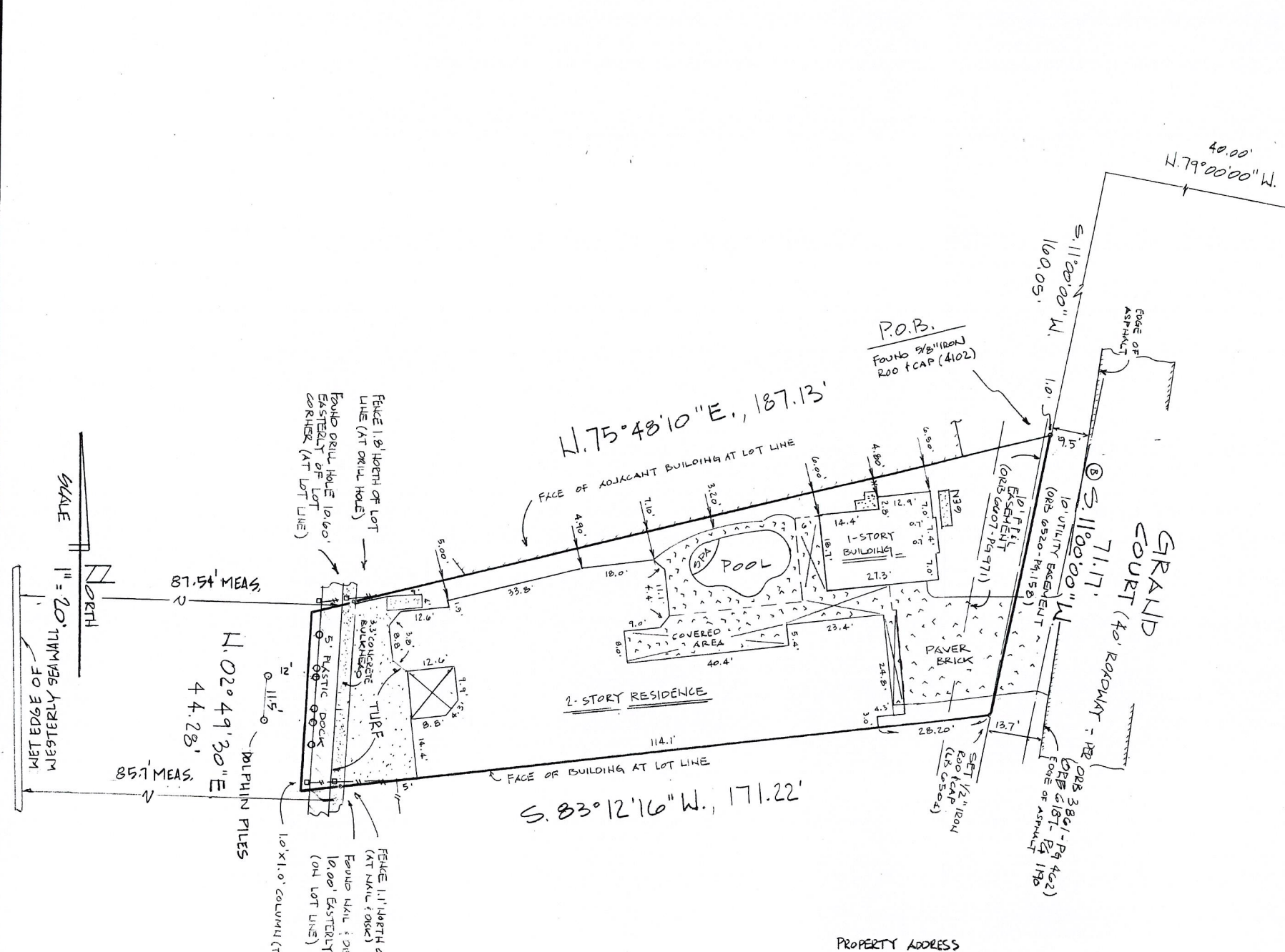


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HIGHLAND BEACH BUILDING DEPARTMENT



LEGAL DESCRIPTION

GRAND CAY ESTATES, LOT 2

A PARCEL OF LAND IN SECTION 9, TOWNSHIP 47 SOUTH, RANGE 43 EAST, PALM BEACH COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE POINT OF INTERSECTION OF THE NORTH LINE OF SAID SECTION 9 AND THE WEST RIGHT-OF-WAY LINE OF STATE ROAD A1A AS LAID OUT AND NOW IN USE (100 FOOT RIGHT-OF-WAY); THENCE, SOUTH 89° 52' 10" WEST ALONG SAID NORTH LINE OF SECTION 9, A DISTANCE OF 228.33 FEET; THENCE, SOUTH 11° 00' 00" WEST, ALONG THE MOST WESTERLY WEST LINE OF THAT PARCEL OF LAND DESCRIBED IN OFFICIAL RECORD BOOK 3423, PAGE 1629, A DISTANCE OF 238.08 FEET TO A POINT ON NORTHERLY BOUNDARY OF THAT PARCEL OF LAND DESCRIBED IN OFFICIAL RECORD BOOK 3861, PAGE 457; THENCE NORTH 79° 00' 00" WEST ALONG SAID NORTH LINE, A DISTANCE OF 40.00 FEET; THENCE SOUTH 11° 00' 00" WEST, A DISTANCE OF 160.05 FEET TO THE POINT OF BEGINNING; THENCE, CONTINUING SOUTH 11° 00' 00" WEST, A DISTANCE OF 71.17 FEET; THENCE SOUTH 83° 12' 16" WEST, A DISTANCE OF 171.22 FEET; THENCE, NORTH 02° 49' 30" EAST, A DISTANCE OF 44.28 FEET; THENCE, NORTH 75° 48' 10" EAST, A DISTANCE OF 187.13 FEET TO THE POINT OF BEGINNING.

PROPERTY ADDRESS

1002 GRAND COURT
HIGHLAND BEACH, FL 33481

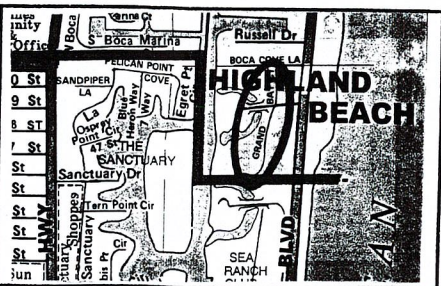
ALL ITEMS LISTED IN TITLE COMMITMENT No. 974240 DATED 11-4-2020 THAT AFFECTS THIS SURVEY ARE SHOWN HEREON

BEARINGS SHOWN HEREON ARE RELATIVE TO PLAT AND ARE ASSUMED.

ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 UNLESS OTHERWISE NOTED.

NO BELOW GROUND IMPROVEMENTS, FOOTERS, FOUNDATIONS OR UTILITIES HAVE BEEN LOCATED OR SHOWN ON THIS SURVEY.

O.R.B. = official record book	Tran. = transformer pad	P.B. = plat book	P = plat	PG = page
C.B.S. = concrete block structure	F.P. & L = Florida Power & Light	Typ = typical	Ø = power pole	I.R. = iron rod
P.C.C. = point of compound curve	CM = concrete monument	R.W. = right-of-way	M = measured	R = radius
P.C.P. = permanent control point	P.R.C. = point of reverse curve	Δ = central angle	I.P. = iron pipe	D = deed
P.O.C. = point of commencement	P.I. = point of intersection	⊙ = bearing basis line	RP = radius point	O/S = offset
P.O.B. = point of beginning	P.T. = point of tangency	Asph = asphalt	L = arc length	Conc = concrete
D/E = drainage easement	* = not field measured	M.H. = manhole	CL = centerline	Esm = easement
C.M.P. = corrugated metal pipe	W/PF = wood privacy fence	U/E = utility easement	ALUM = aluminum	Calc = calculated
R.L.S. = registered land surveyor	Chall = chattahoochee	CLF = chain link fence	P.C. = point of curvature	L.B. = licensed business
P.S.M. = professional surveyor & mapper		ELEV = elevation	P.R.M. = permanent reference monument	



Reiner Burgess, Inc.
LAND SURVEYING

801 S.E. 6th Ave., Suite 203
Delray Beach, FL 33483

Phone 561-243-4624
Fax 243-4889

Authorization Number: LB6504

I HEREBY CERTIFY THAT THE SKETCH OF BOUNDARY SURVEY SHOWN HEREON MEETS THE STANDARDS OF PRACTICE SET FORTH IN CHAPTER 115.02, F. FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 115.02, FLORIDA STATUTES.

Reiner Burgess, Inc.
Date: 2023.12.07

Certified To:

Camron M. Walsh;
Kenneth M. Kaleel, P.A.;
Old Republic National Title Insurance Company

Flood Zone: AE ELEV 6

Map No: 125110989F

Map Date: 10-5-17

Date: 10-18-2023

Job No: 12-20-020

Revised:

Not valid unless sealed with embossed surveyor's seal

12-7-23 CANAL WIDTH