

CRMC DECISION WORKSHEET

2018-12-037

Jon Janikies

| | |
|------------------------------------|------|
| Hearing Date: | |
| Approved as Recommended | |
| Approved w/additional Stipulations | |
| Approved but Modified | |
| Denied | Vote |

| APPLICATION INFORMATION | | | | | | |
|-------------------------|-------------------------------|--|-----|----------------------|--------------------------|----------|
| File Number | Town | Project Location | | Category | Special Exception | Variance |
| 2018-12-037 | Narragansett | 166 Waterway Drive | | B | <input type="checkbox"/> | X |
| | | Plat | N-B | | | |
| | | Owner Name and Address | | | | |
| Date Accepted | 12/17/2018 | Jon Janikies | | Work at or Below MHW | | X |
| Date Completed | 8/6/21 *amended 10/05/2021 | 166 Waterway Saunderstown, RI 02874 | | Lease Required | <input type="checkbox"/> | |

PROJECT DESCRIPTION

Construct a residential boating facility consisting of a ~4' x 85' fixed timber pier leading to a ~4' x 20' fixed terminal L section. In addition a 30,000lb boat lift and a jet ski lift are proposed. The facility is proposed ~111' in length, extending ~72' seaward of the cited MLW mark.

KEY PROGRAMMATIC ISSUES

Coastal Feature: Rocky shoreline, vegetated coastal bluff, partially armored coastal bank

Water Type: Type 2, Low Intensity Use, Narragansett Bay West Passage

CRMP: 1.1.4(A), 1.1.7, 1.2.1(A), 1.2.2(D), 1.2.2(E), 1.2.2(F), 1.3.1(A), 1.3.1(D), 1.3.1(P), 1.3.5

SAMP: N/A

Variances and/or Special Exception Details: This design requires a 22' length variance to Red Book 650-RICR-20-00-01 Section 1.3.1(D)(11)(l), a 50' mooring field setback variance to Section 1.3.1(D)(11)(m), a variance to Section 1.3.1(D)(11)(p) for geologic site conditions to be appropriate for driven pile structural support, and a variance to Section 1.3.1(D)(11)(r) for steel pile construction.

Additional Comments and/or Council Requirements: Consideration of objector's comments; *Council is also required to review/approve the proposed residential boating facility prior to review/approve a proposed boat lift.

Specific Staff Stipulations (beyond Standard stipulations):

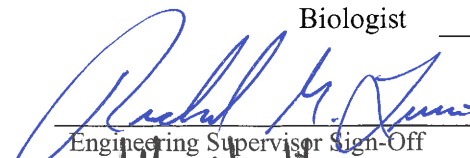
STAFF RECOMMENDATION(S)

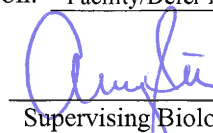
Engineer RAS

Recommendation: No Technical Objection to Boating Facility/Defer for Boat Lift/Objector

Biologist TAS

Recommendation: No Technical Objection to Boating Facility/Defer for Boat Lift/Objector


Engineering Supervisor Sign-Off 10/5/21
date


Supervising Biologist Sign-off 10/8/21
date


Executive Director Sign-Off 8 OCT 2021
date

Staff Sign off on Hearing Packet (Eng/Bio) _____ date

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
COASTAL RESOURCES MANAGEMENT COUNCIL
STAFF REVIEW**

TO: *Jeffrey Willis, Executive Director Date: 6 August 2021 *amended 10/05/21
DEPT: Coastal Resources Management Council
FROM: T. Silvia, R. Singer
DEPT: CRMC Permitting Section

SUBJ: CRMC File No.: 2018-12-037
 Owner: Jon Janikies
 Site Address: 166 Waterway Drive Plat: N-B Lot: 1
 Site Town: Narragansett
 Project: To c/m a residential boating facility with 30,000lb boat lift and jet ski lift.

Water Type/Name: II, Low Intensity Use, Narragansett Bay, West Passage

Coastal Feature: Rocky shoreline, vegetated coastal bluff, partially armored coastal bank

Project description:

The proposed residential boating facility consists of a 4ft x 85ft fixed timber pier leading to a 4ft x 20ft fixed terminal L section with a 30,000lb boat lift and a jet ski lift. The facility is proposed 111' in length, extending 72' seaward of the cited MLW mark. This design requires a 22' length variance to Red Book 650-RICR-20-00-01 Section 1.3.1(D)(11)(l), 50' setback variance to Section 1.3.1(D)(11)(m) and **variances to 1.3.1(D)(11)(p)/1.3.1(D)(11)(r) for steel construction.* The project requires Council review for a boat lift in Type 2 waters, **provided the dock is approved.*

Reviewed plans: Ten sheets entitled “Proposed Residential Pier for Jonathan Janikies, 166 Waterway, Narragansett, AP NB, Lot 1, North Kingstown AP 1, Lot 148..” last revised April 2, 2020 by Warren F. Hall, RPE and One Sheet entitled “Plan Showing Mooring Area C...” dated Feb 19, 2021 by same.

Staff Comments/Recommendation: No Technical Objections to the Proposed Residential Boating Facility, Defer to the Council regarding the Proposed Boat Lift and Objectors' Comments

A--Location/Site history:

1) The project site is along a residential shoreline in Saunderstown, which is located partially within the Towns of Narragansett and North Kingstown **(Figure 1)*. The facility is proposed along the Narragansett shoreline. Several existing docks are located along this stretch, though none quite the size as the current proposal. The site is comprised of residential development with large lawn leading to a mostly vegetated steep coastal bank. However, pre-existing manmade shoreline components, including concrete deck, revetment and kitchen/patio area also exist on the site. Historically, a previous dock founded from this developed portion of the shoreline but it is long since removed and has no valid CRMC permit. Previous CRMC Enforcement action has been issued regarding various work on the existing wall and developed feature, however the violations were deemed clear by the Executive Director prior and a re-check by CRMC Enforcement in 2019 also deemed no current violations regarding the existing shoreline development.

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2) The facility is proposed to extend from the existing patio structure. Although relocating the proposed structure further north could reduce potential neighbor conflict (see below) and potential construction difficulties due to an existing rock, staff has determined that in order to best protect the existing vegetated coastal bluff, the facility is proposed to found from a location with the least environmental impact.

B--Review Process:

1) This application was received in late 2018 and commenced a 30day public notice period in January 2019. Staff discussed the project at a site visit on 1/15/19 with a representative of the owner. The length of the facility was at issue and staff advised the facility should be shortened. The US Army Corps of Engineers (ACOE) deemed the project eligible for a Pre-Construction Notification (PCN) review on 1/10/19, which requires direct approval from the ACOE. Later that month, staff received email, written and in-person queries from various concerned parties, mostly regarding the previous Enforcement history of the site, potential prop wash impacts, the distance to nearby moorings and the installation methods of the facility due to the large exposure of the site. More specific concerns were also raised by a nearby landowner regarding upland and non-CRMC-related activities and use of the site by the owners.

2) In February 2019, staff relayed the concerns to the owner, explained the review process and recommended a shorter facility to reduce the variance. Staff also determined the proposed location was in the best spot environmentally and Enforcement staff confirmed that the site was in conformance with previous requirements. In March, staff emailed the PE requesting reduction in length and supporting variances and updated the applicant's attorney regarding the project status. Throughout spring 2019 staff continued to update an objector's attorney regarding the project status as well. In late May the applicant's attorney indicated the project was being reviewed by the dock builder and may be modified and in July 2019 staff spoke with the applicant directly regarding status. The applicant was concerned with the amount of water depth and was considering rescinding and reapplying with a new design. Staff noted that either holding for revisions or re-filing separately would still require a re-Notice and likely still receive objections. At issue was still the variance minimization related to length.

3) A 30day cancellation notice was issued January 2020 after no new information had been received and staff received revised plans in early February 2020. Staff contacted the PE and owner to indicate the project was not minimized (it was now longer than the original submission) and still hadn't addressed the previous variance burdens of proof or objector concerns and could not receive staff support. Staff strongly advised the applicant revise the project to reduce the requested length variance. In April 2020 revised plans were received which had shortened the request and the project was sent to re-Notice. Similar and additional comments were again received during the public notice period. In May, staff received the PE updated response/variance request and the ACOE reviewed the project, again holding it PCN-eligible pending Council decision. In July, staff requested a final written minimization statement re the facility and staff reports were drafted. In September, final information from the PE was received. The application remained pending due to National Grid and various offshore wind farm applications as well as COVID constraints which reduced Council agenda availability.

CRMC File Number

4) In February 2021, staff belatedly learned **through an objector* that a Town mooring field was in the vicinity of the proposal and requested an update from the PE regarding the proposal relative to the mooring field. The PE supplied additional information relative to the field, including an updated plansheet reflecting the mooring field location and additional variance request. Minutes from the Town's Harbor Commission meeting which recommended approval of the facility in its proposed location were also submitted **although the mooring field location/setback was not included on the plans reviewed, staff presumed the Commission reviewed the project relative to its Harbor Management Plan which includes mooring fields*. The Executive Director determined a 3rd re-Notice was not required. The application remained with staff report writing since.

5) **The application was scheduled to be heard at the August 24, 2021 Council meeting, however, an objector requested a continuance which was granted. In order to clarify all required variances for the project (including steel pile construction, length and mooring field setback distance), a 3rd 30-day public notice was issued on 8/10/21, which concluded with several additional comments.*

6) **Additionally, the Town of Narragansett's Harbor Commission re-heard the proposal on 9/7/21 and voted to place the matter on file. That motion results in no additional formal action at this time from the Town. The Harbormaster has since confirmed that of the two existing moorings in the adjacent mooring field, the only one anywhere near the applicant's proposed dock is owned by the applicant and has since been moved slightly north, into North Kingstown waters.*

C--Proposed Project:

1) The residential boating facility is proposed to be located extending from the existing concrete deck. This location was agreed to by staff numerous times as the best environmental choice for the facility as 1) it was in a location similar to the previously existing dock and 2) it avoided any impact to the thickly vegetated steep bank and 3) it met the minimum 25' setback from adjacent property line extensions. The fixed pier is proposed to extend 45 feet to clear a large boulder located at 38 feet past MLW. The pier is then proposed to step down to a fixed 4ft x 20ft terminal L section. The terminal L is located 55 feet from MLW. A 30,000 lb boat lift is proposed at the terminus; piles associated with the boatlift are proposed 72 feet from MLW. In addition, a jet ski lift is proposed on the southern side of the L section, which is allowed under RICRMP regulations.

2) Although not located in a high fetch area, the site can be subjected to significant wave action. Due to this fact, the applicant has chosen a fixed pier design and boat lift rather than a conventional ramp leading to a terminal float. Batter piles are proposed as an extra measure to resist lateral force associated with wave action.

3) The applicant has stated the possible use of ledge anchors and rock sockets may be required due to site conditions. **A variance is therefore required to Section 1.3.1(D)(11)(p) & 1.3.1(D)(11)(r) which require geologic site conditions appropriate for pile driven structural support and limit steel materials.* Ledge anchors and rock sockets have been permitted in similar conditions. Relative to comments received, ledge anchors may be required due to a large rock outcrop located at 71 feet from the beginning of the pier. In addition, pre drilled rock sockets may

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be required where barge mounted pile driving is unfeasible due to site conditions. It should be noted that other docks have been constructed in the area with similar geological site conditions.

4) A variance is also required to RICRMP Section 1.3.1(D)(11)(m) which states that docks piers and floats shall be set back at least 50 feet from an approved mooring field. The Town of Narragansett Mooring Area C is located exactly at the terminus of the proposed facility. There is only one mooring in the area, owned by the applicant, located 165 feet from the proposed facility. The Narragansett Harbor Management Commission met on May 5, 2020, and approved the boating facility 6-0 without discussion. It will be recommended through CRMC policy staff that the Harbor Commission make appropriate revisions to Mooring area C if this project is approved by the Council, however past CRMC practice is to consider a Town signoff on a mooring issue as support for the setback variance.

5) A length variance (RICRMP Section 1.3.1(D)(11)(l)) is necessary due to the fact that the pier must span the large boulder located 38 feet beyond mean low water. The boulder presents a hazard if it is not spanned, and it is too large to be easily removed without blasting. Terminating the facility inland of the rock also does not appear to leave appropriate navigational area either and it is the opinion of staff that the boulder should not be removed. Additionally, the applicant has provided information from the Professional Engineer that the boulder could move slightly in large storm wave action, possibly damaging the facility or vessel should the pier be located closer to the rock. In addition, the boulder is located within wave breaking and tripping zone which would increase wave loads to the structure. The proposed boat lift would be located 15 feet from the boulder, and relocating it closer to the boulder may create a hazard. It is staff's opinion that the proposed design location is reasonable relative to this rock.

6) Historically, in open water bodies of Narragansett and Mount Hope Bays, docks to greater water depths have been permitted. More recently, CRMC guidance has permitted facilities to approximately 3' water depth for a standard dock at 50' MLW. In many open waters of the state, this depth can be reached within 50', correspondingly, in many of these areas there is much greater water depth found at a ~50' MLW distance. This facility is consistent with similar length facilities permitted by the CRMC in other open waters of the State.

7) The original proposal required a 25' length variance for 75' MLW/~7' water at the terminus. The revised proposal required a 35' length variance for similar depth and the final revised proposal (most recent Notice) requires a 22' length variance for 72' MLW/5-6' water at the terminus. Although the applicant has reduced the length from the early 2020 proposed design by 13', he has only reduced the design from the original proposal by 3'. The proposed pier length was reduced significantly; however the boat lift and associated piles were relocated to the terminus. Holding the applicant to a strict 3' water depth would alleviate the variance however it leaves the facility in conflict with the rock as noted above. The Council may wish to note, however, without any public comment, the requested length variance of 22' would typically be reviewed administratively by staff for a facility such as this. The requested boat lift (Type 2 waters) and comments received require full Council hearing on the matter.

8) It should be stressed that Boat lifts are considered accessory structures, and the design for a proposed residential boating facility is considered separate from the need for a boat lift. CRMP 1.3.1(P)(2)(c) states: "*Boat and float lifts (defined in § 1.1.2(A)(18) of this Part) are considered by the Council to be accessory structures to residential boating facilities, and as the*

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Council only approves or denies a recreational boating facility on the merits of the structure given existing site conditions, boat and/or float lift requests shall not be deliberated by the Council unless the Council has separately or previously approved an application for a residential boating facility...” The fixed pier with a terminal L extends 55 feet beyond mean low water, and only requires a length variance of 5 feet. Other docks in the area are between 80ft and 125ft and extend 50 feet beyond mean low water. While the applicant’s proposed boat lift extends farther beyond mean low water than other existing facilities in the area, the proposed total pier length, not including the boat lift, of 90ft is not distinctly out of line for the area.

9) The boat lift proposed at the terminus of the fixed pier and the jet ski lift have been designed in accordance with standards listed in §1.3.1.(P)(4). Stop blocks are proposed to prevent the gunwale of the vessel from being higher than the elevation of the fixed pier. The height of the lift system is not proposed higher than the elevation of the pilings used to construct the dock and only the winch of the lift system is proposed affixed to the top of the pilings. Other facilities in the area have approved boat lifts and float lifts, although the proposed 30,000 lb boat lift is considerably larger. While the Red Book does not specify a maximum boat lift size, it should be noted that this application for a boat lift proposed in Type 2 waters should be justified for its appropriateness in the area. §1.3.1.(P)(1)(b) states: *It is the Council’s policy to assess all boat and/or float lifts for their appropriateness given site conditions, including impacts on public trust and coastal resources, aesthetic and scenic resources, and cumulative impacts. Boat and/or float lifts in Type 2 waters shall be allowed only for the minimum amount necessary to accommodate a residential dock.* The proposed boat lift is much larger than other lifts approved in the area. Furthermore, the applicants have a mooring located in the proximity of the proposed facility. Staff defers to the Council to make the determination whether the proposed boat lift and its size are considered the “minimum amount necessary.”

D--Objections/Comments:

1) Numerous comments have been filed on this proposal. Specifically, staff has spoken with many of the objectors directly or via email or thru their attorney. The concerns range from dissatisfaction with the previous Enforcement actions on the site to specific dock construction and use impacts to issues which have no direct relevance to CRMC regulatory authority. For those concerns which relate to CRMC standards and policies, staff offers additional comment below, as applicable.

2) It is staff’s opinion that the proposed design allows for continued water-dependent uses such as the cited near-shore non-motorized paddleboard traffic as well as swimmers. It should also be noted that CRMC does not regulate the use of the facility (jet ski operations, etc), which was cited often as a concern. There is also no SAV or coastal wetland present at this site.

3) Scenic/aesthetic impacts should be taken into consideration with this proposal. Although the design is not uncommon for other waters of the State (Mt Hope Bay, Bristol, Jamestown, Newport, Sakonnet River, etc), it is much larger in scope than many along this West Passage shoreline (likely due to the fact that much of the West Passage shoreline is Type 1 waters, which prohibits new docks outright).

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4) The mooring field setback and ledge anchoring has been discussed elsewhere in the report. Prop wash is not directly regulated by CRMC standards, however, the proposed design appears sufficient to allow use of the facility without impact from potential prop wash.

5) Current upland lighting has been raised as a concern, and although CRMC is not the proper authority for this issue, it should be noted that concern extends to proposed lighting for the facility. CRMC often permits low-level lighting in other dock approvals throughout the state and the Council may wish to specify such requirements if the facility is approved.

6) Comments were entered relative to alleged prior actions of the applicant, related to the existing wall/patio/concrete layout and upland tree removal. CRMC Enforcement staff investigated and cleared potential violations under previous review and re-confirmed the existing site conditions' compliance during review of this application. Permit staff did not further review these issues.

7) Overall, the majority of comments pertained to the visual/aesthetic impacts of the proposed facility on this particular shoreline, where many of the docks have historically been shorter and/or seasonal in nature. Cumulative scenic impacts from facilities with similar designs in the future may become significant on this shoreline.

8) **The majority of the objections received during the August 2021 re-Notice period were similar to or expanding upon earlier comments related to potential storm damage, aesthetic concerns, neighborhood and shoreline use conflicts and/or proposed construction methods.*

Variance request:

1) The applicant has provided updated variance requests as required. With the exception of the potential for cumulative scenic/aesthetic impact, it is staff's opinion that the facility has been designed consistent with the applicable goals and policies of the CRMCP and will not result in significant adverse environmental impacts or use conflicts.

2) Due to the site conditions (steep vegetated bank, rock outcrop, ledge, high wave energy, mooring field), the applicable 50' MLW length and 50' mooring field setback and driven pile variance cannot be met and the chosen design/location of the pier portion of the facility is a reasonable use of the site. Local harbor commission *review has indicated no conflict with the proposed facility location, including distance to nearby mooring field.*

3) Staff defers to the Council on the issue of whether first the location and second the size of the proposed boat lift is appropriate for this shoreline. The lift itself does not require a variance, but does factor into the pier's length variance. However, staff could still support a length variance for the pier seaward of 50' MLW without a boat lift due to the site conditions.

Summary:

In summary, the site is 'typical' of shorelines with residential boating facilities across the state's coastal waters. High energy environments and water depths combined with an existing rock necessitate a length variance for a new dock in this location. Staff has consistently upheld the chosen location as least environmental impact to the vegetated steep coastal bank and does not support relocating the proposed pier from the concrete patio. **Provided the Council approves the proposed dock*, whether the boat lift is appropriate for this shoreline and of this magnitude is deferred to the Council for consideration of current and cumulative scenic/aesthetic impacts.

**Following review of a 3rd public notice period and local harbor commission input staff's opinion of this application review remains the same as originally stated: There are no technical biologic or engineering objections to the above described residential boating facility and staff defers to the Council for consideration of the variances and appropriateness of the proposed dock and boat lift as well as the associated objections. Standard stipulations have been withheld pending Council's decision.*

Signed  Staff Engineer


Signed  Staff Biologist

Figure 1

Janikies, #2018-12-037

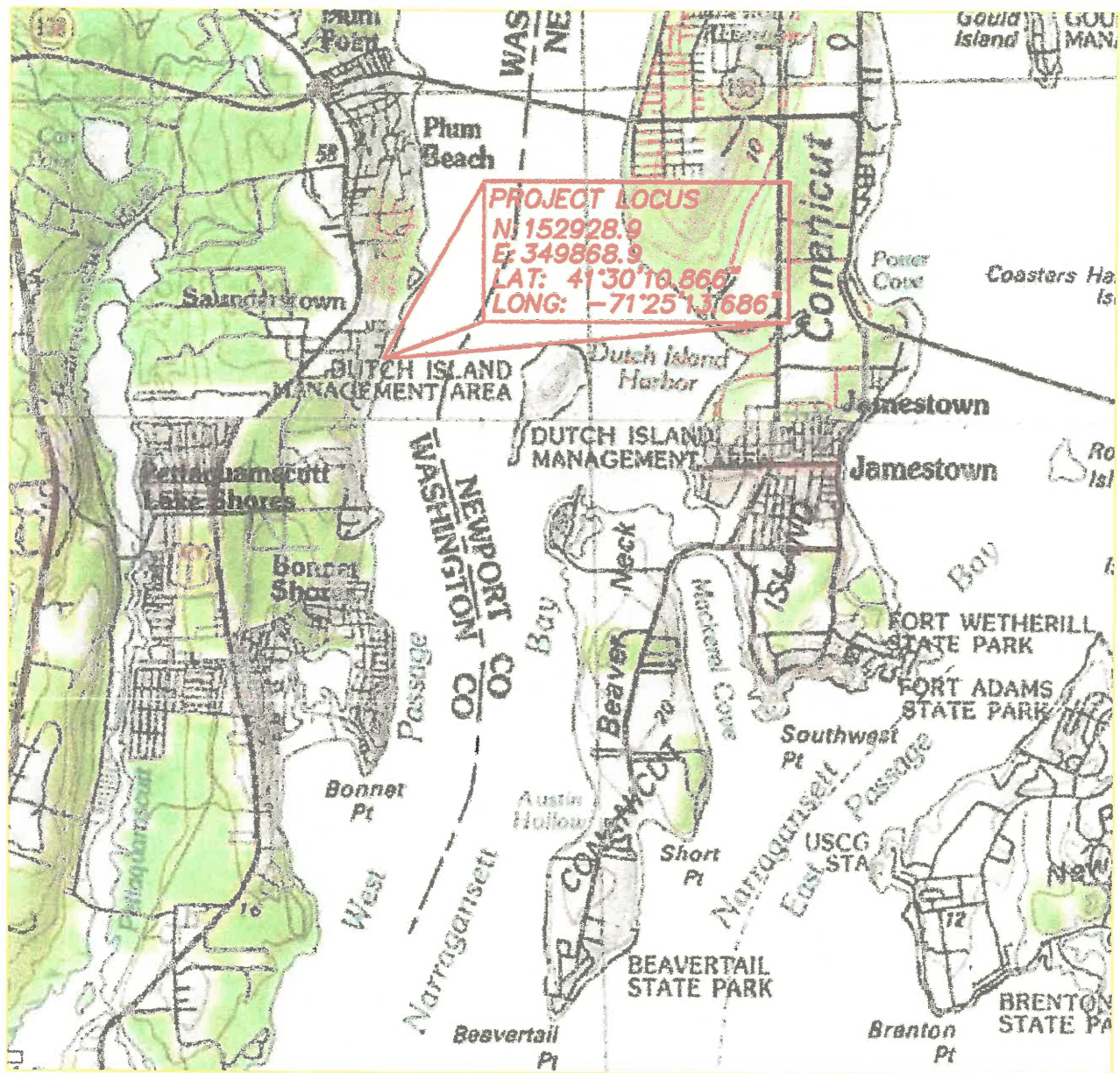


Legend

- ?? Chapel of St. John the Divine Episcopal Church
- ?? Saunderstown Yacht Club
- ?? United States Postal Service
- ? ? Willett Free Library
- 166 Waterway

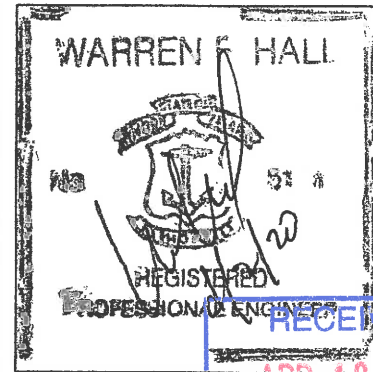
1000 ft





LOCUS PLAN
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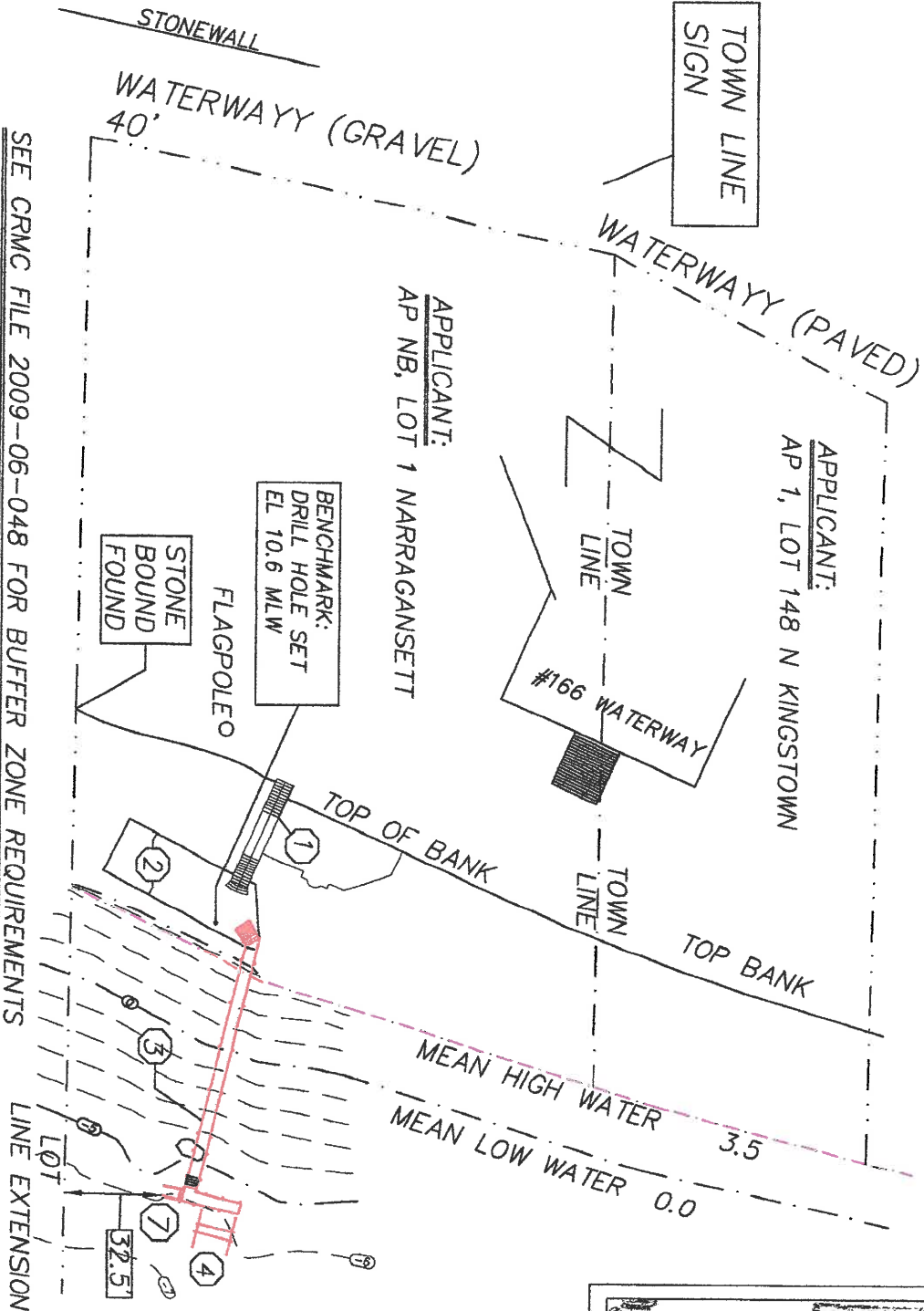
PROPOSED RESIDENTIAL PIER FOR:
 JONATHAN JANIKIES
 166 WATERWAY
 NARRAGANSETT AP NB, LOT 1
 NORTH KINGSTOWN, AP 1, LOT 148
 BY: WARREN HALL, CIVIL ENGINEER
 APRIL 2, 2020 SHEET 1 OF 10



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PROPOSED RESIDENTIAL PIER FOR:
 JONATHAN JANIKIES
 166 WATERWAY
 NARRAGANSETT AP NB, LOT 1
 NORTH KINGSTOWN, AP 1, LOT 148
 BY: WARREN HALL, CIVIL ENGINEER
 APRIL 2, 2020 SHEET 2 OF 10

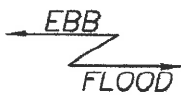
SEE CRMC FILE 2009-06-048 FOR BUFFER ZONE REQUIREMENTS



- ① EXISTING STEPS
- ② EXISTING CONCRETE DECK
- ③ PROPOSED PIER
- ④ 30,000# BOAT LIFT
- ⑦ JET SKI LIFT



NARRAGANSETT BAY
 WEST PASSAGE
 CRMC TYPE 2 WATER



WARREN F HALL

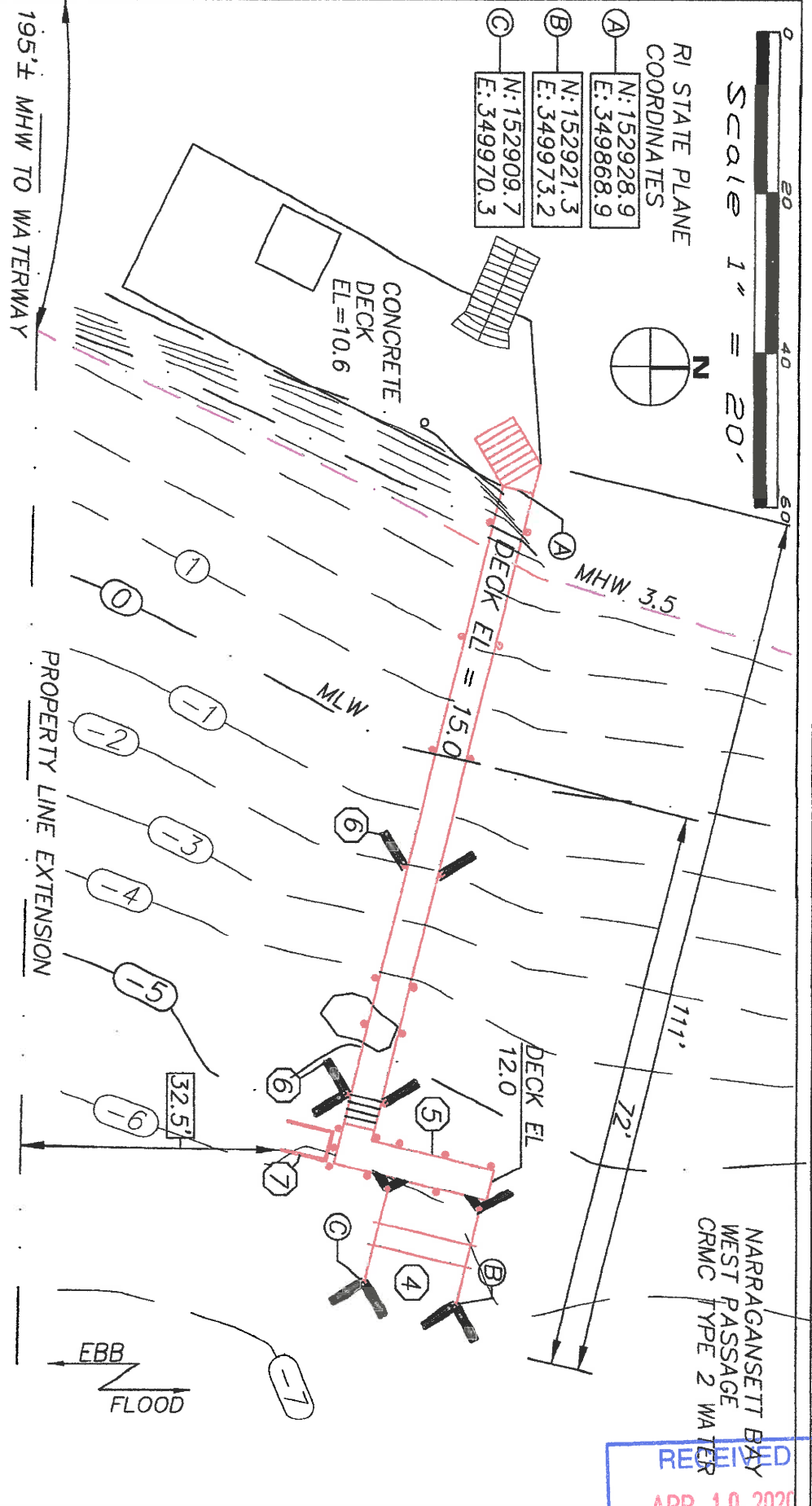
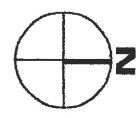
REGISTERED PROFESSIONAL ENGINEER

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 APR 10 2020
 COASTAL RESOURCES
 MANAGEMENT COUNCIL



RI STATE PLANE
COORDINATES

| | | |
|-----|-------------|-------------|
| (A) | N: 152928.9 | E: 349868.9 |
| (B) | N: 152921.3 | E: 349973.2 |
| (C) | N: 152909.7 | E: 349970.3 |



NARRAGANSETT BAY
WEST PASSAGE
CRMC TYPE 2 WATER

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APR 10 2020
COASTAL RESOURCES
MANAGEMENT COUNCIL

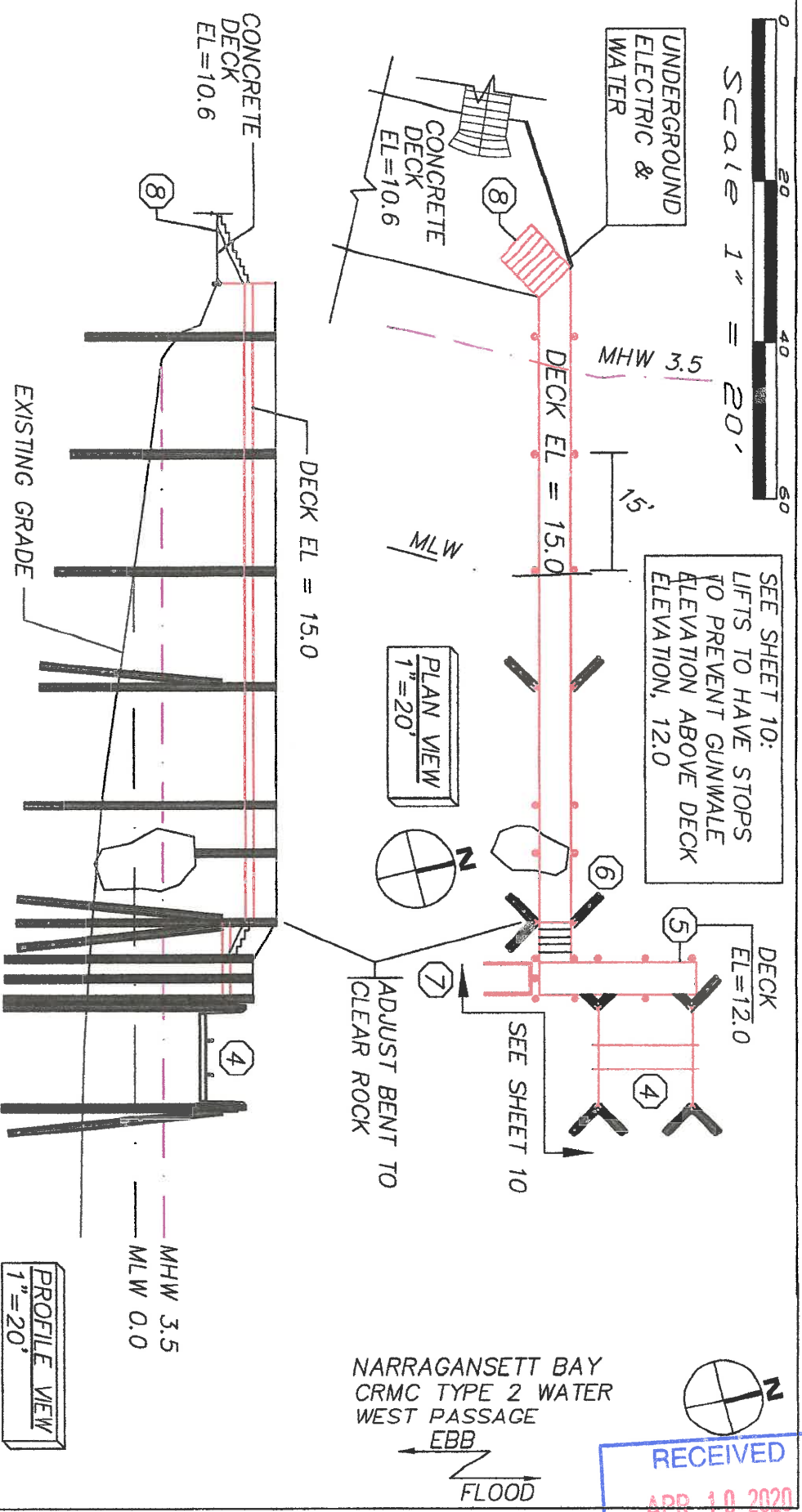
PROPOSED RESIDENTIAL PIER FOR:
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NARRAGANSETT AP NB, LOT 1
NORTH KINGSTOWN, AP 1, LOT 148
BY: WARREN HALL, CIVIL ENGINEER
APRIL 2, 2020 SHEET 3 OF 10

- (4) 30,000# BOAT LIFT
- (5) 4'x20' FIXED ACCESS DECK EL = 12.0
- (6) BATTER PILES
- (7) JET SKI LIFT

WARREN F. HALL
REGISTERED PROFESSIONAL ENGINEER
M.S. 58 1/8
1983



SEE SHEET 10:
LIFTS TO HAVE STOPS
TO PREVENT ABOVE GUNWALE
ELEVATION, 12.0



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NARRAGANSETT BAY
CRMC TYPE 2 WATER
WEST PASSAGE
EBB
FLOOD

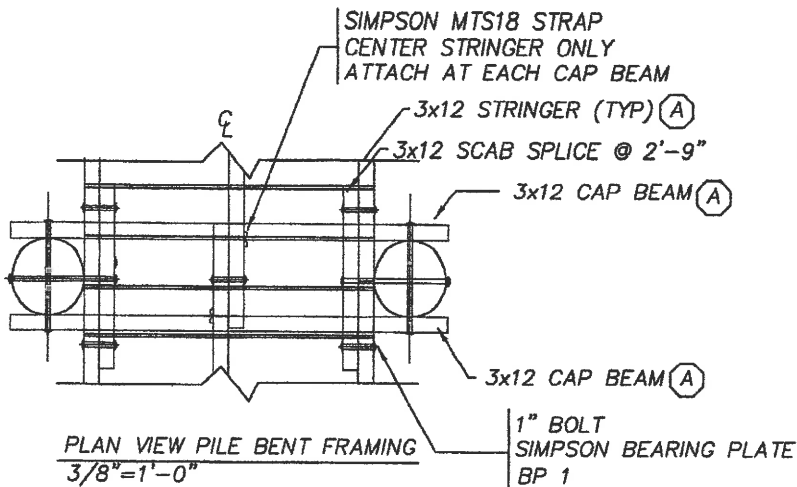
PROFILE VIEW
1" = 20'

MHW 3.5
MLW 0.0

PROPOSED RESIDENTIAL PIER FOR:
JONATHAN JANIKIES
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NARRAGANSETT AP NB, LOT 1
NORTH KINGSTOWN, AP 1, LOT 148
BY: WARREN HALL, CIVIL ENGINEER
APRIL 2, 2020 SHEET 4 OF 10

- ④ 30,000# BOAT LIFT
- ⑤ 4'x20' FIXED ACCESS DECK EL = 12.0
- ⑥ BATTER PILES
- ⑦ JET SKI LIFT
- ⑧ 3Ø3x12 STRINGER FASTEN TO DECK WITH SIMPSON ANCHORS

WARREN HALL
REGISTERED PROFESSIONAL ENGINEER
6414



GREENHEART PILE PROPERTIES:

MODULUS OF RUTTURE 19,300 PSI
MODULUS OF ELASTICITY 2,470,000 PSI

FRAMING PROPERTIES:

(A) 3x12: 3-1/2"x11-7/8" POWER LAM BEAMS
Fb=2400psi, E=1,800,000psi, Fv=300psi

SOUTHERN YELLOW PINE

Fb 1200 PSI
Fv 80 PSI
DECK PLANKS TO BE 3x8 #1 GRADE

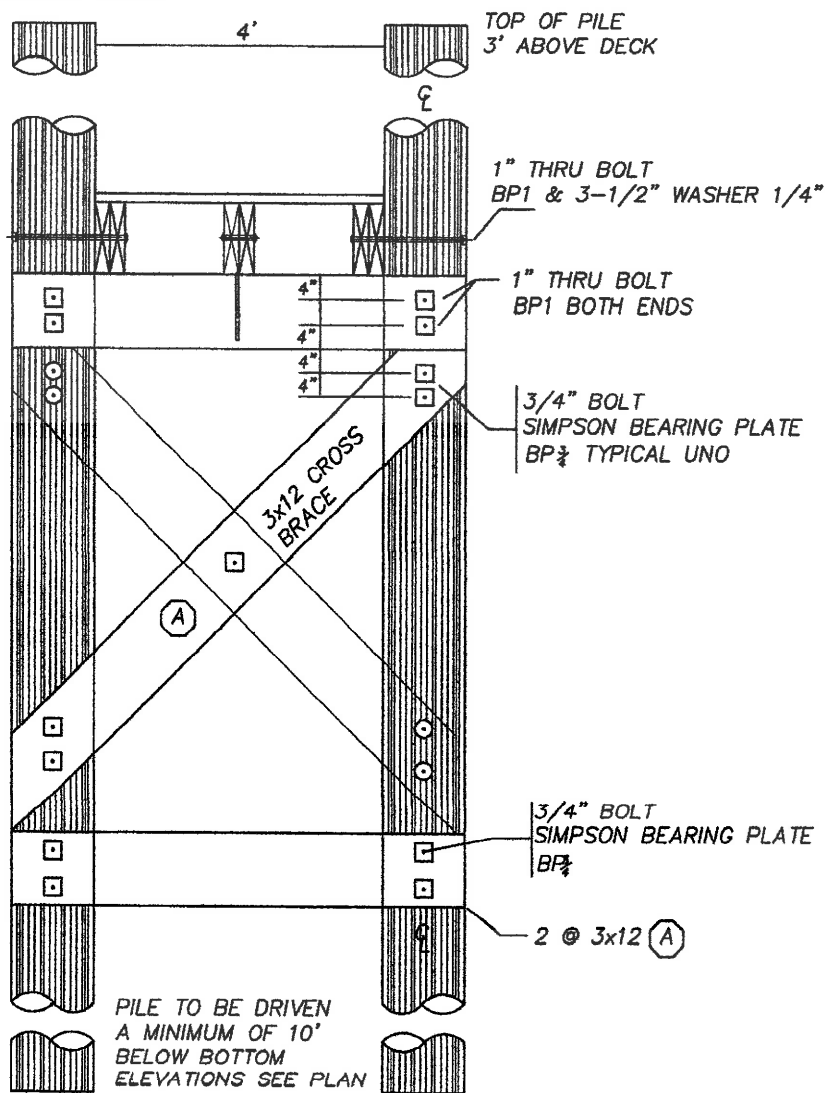
NOTES:

- 1) ALL BOLT HOLES SHALL BE PRE DRILLED 1/16" GREATER THAN DIAMETER OF BOLT
- 2) ALL BOLTS SHALL BE HDG ASTM A307 GRADE A WITH HEAVY HEX NUTS

LEGEND

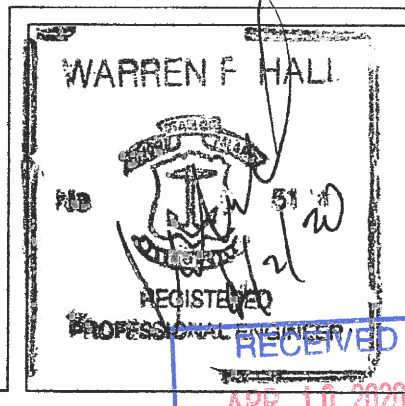
SS: STAINLESS STEEL
HDG: HOT DIPPED GALVANIZED

ALL PILES SHALL BE GREENHEART UNLESS NOTED

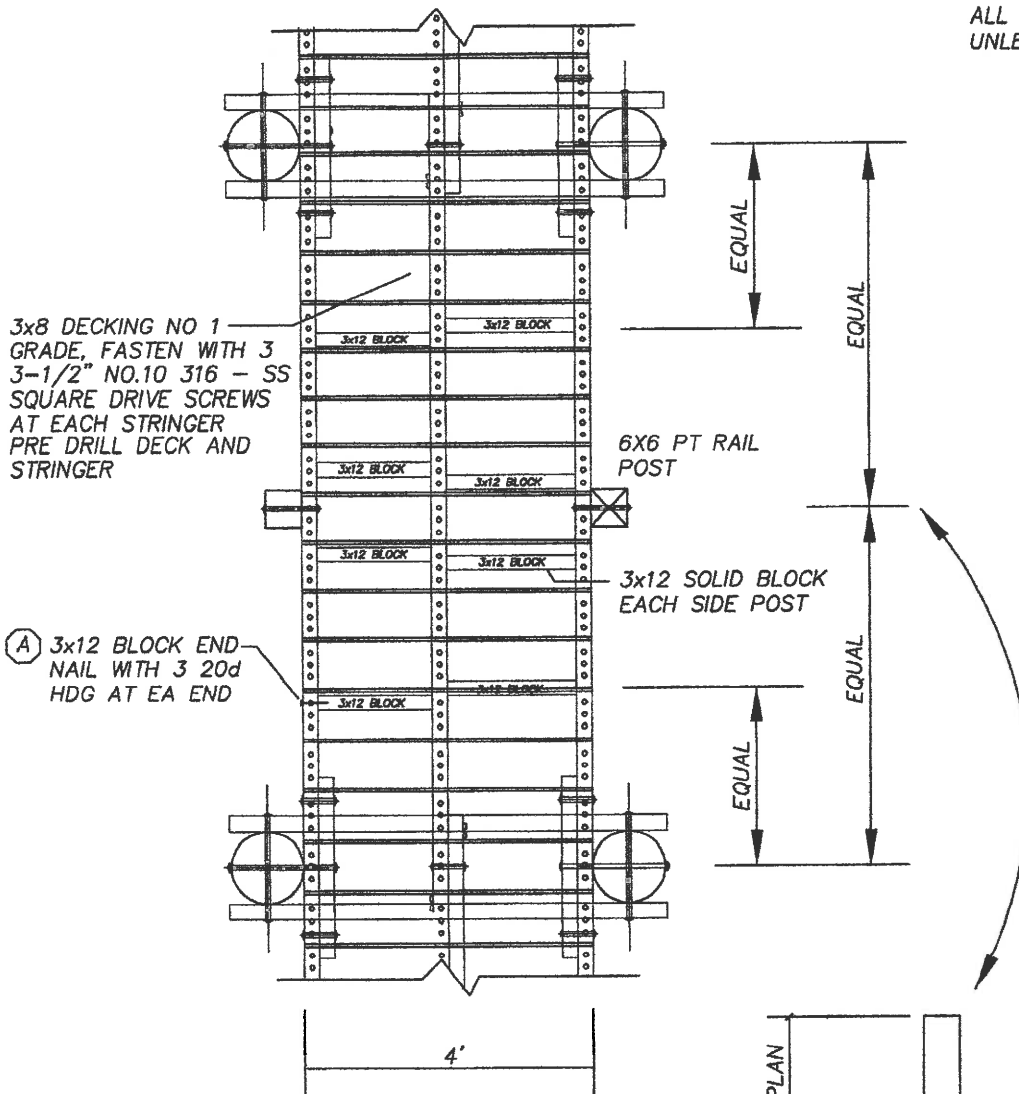


TRANSVERSE SECTION PILE BENT
3/8"=1'-0"

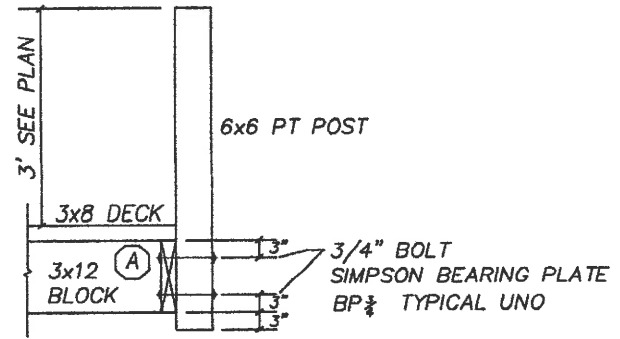
PROPOSED RESIDENTIAL PIER FOR:
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NARRAGANSETT AP NB, LOT 1
NORTH KINGSTOWN, AP 1, LOT 148
BY: WARREN HALL, CIVIL ENGINEER
APRIL 2, 2020 SHEET 5 OF 10



ALL PILES SHALL BE GREENHEART UNLESS NOTED



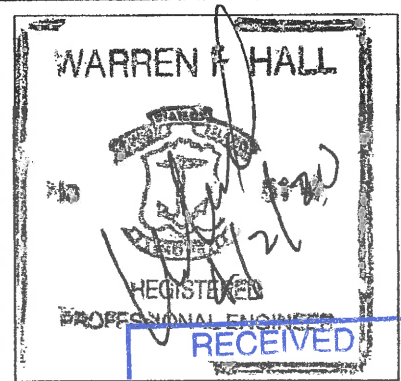
PLAN VIEW TYPICAL FRAMING
3/8"=1'-0"



DETAIL AT RAILING POST
3/8"=1'-0"

(A) 3x12: 3-1/2"x11-7/8" POWER LAM BEAMS
Fb=2400psi, E=1,800,000psi, Fv=300psi

PROPOSED RESIDENTIAL PIER FOR:
JONATHAN JANIKIES
166 WATERWAY
NARRAGANSETT AP NB, LOT 1
NORTH KINGSTOWN, AP 1, LOT 148
BY: WARREN HALL, CIVIL ENGINEER
APRIL 2, 2020 SHEET 6 OF 10



APR 10 2020
COASTAL RESOURCES
MANAGEMENT COUNCIL

ALL PILES SHALL BE GREENHEART
UNLESS NOTED

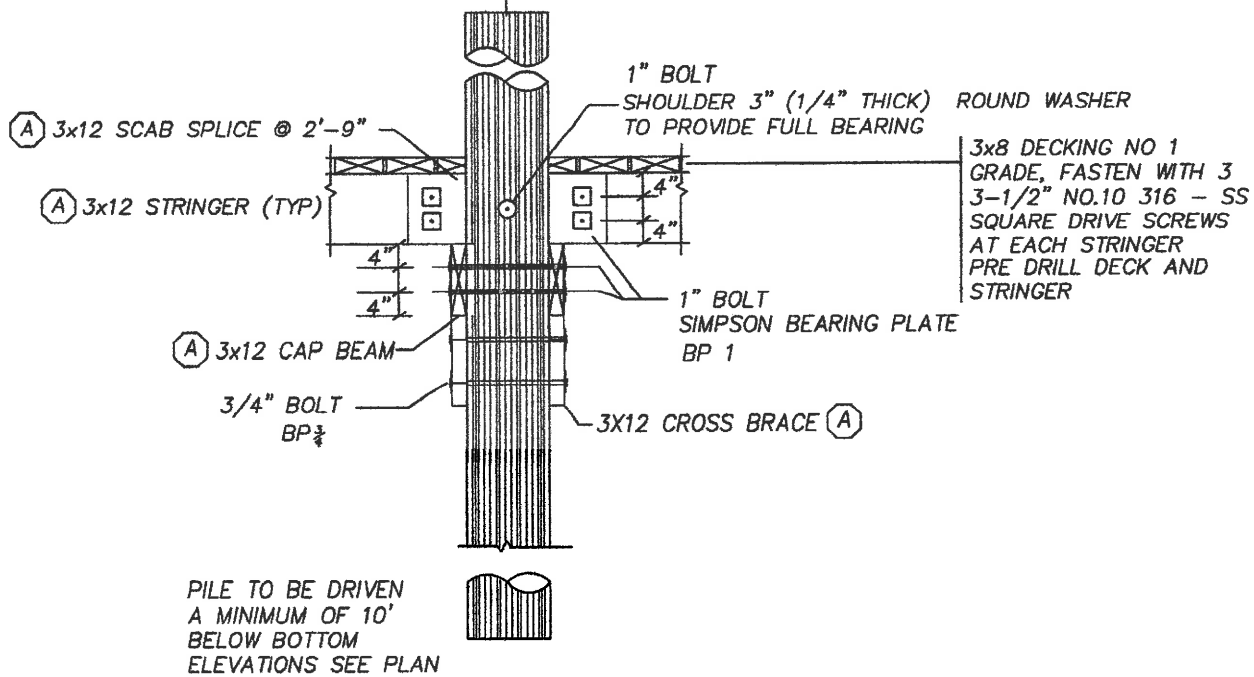
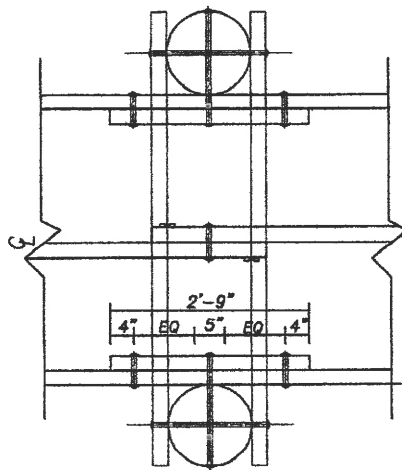
GREENHEART PILE PROPERTIES:
MODULUS OF RUTTURE 19,300 PSI
MODULUS OF ELASTICITY 2,470,000 PSI

FRAMING PROPERTIES:
SOUTHERN YELLOW PINE
F_b 1200 PSI
F_v 80 PSI
DECK PLANKS TO BE 3x8 #1 GRADE

NOTES:
1) ALL BOLT HOLES SHALL BE PRE DRILLED
1/16" GREATER THAN DIAMETER OF BOLT
2) ALL BOLTS SHALL BE HDG ASTM A307
GRADE A WITH HEAVY HEX NUTS

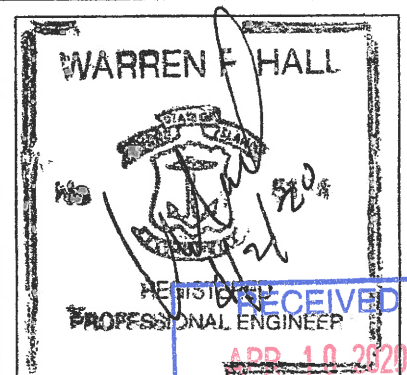
LEGEND
SS: STAINLESS STEEL
HDG: HOT DIPPED GALVANIZED

(A) 3x12: 3-1/2"x11-7/8" POWER LAM BEAMS
F_b=2400psi, E=1,800,000psi, F_v=300psi



LONGITUDINAL SECTION PILE BENT
3/8"=1'-0"

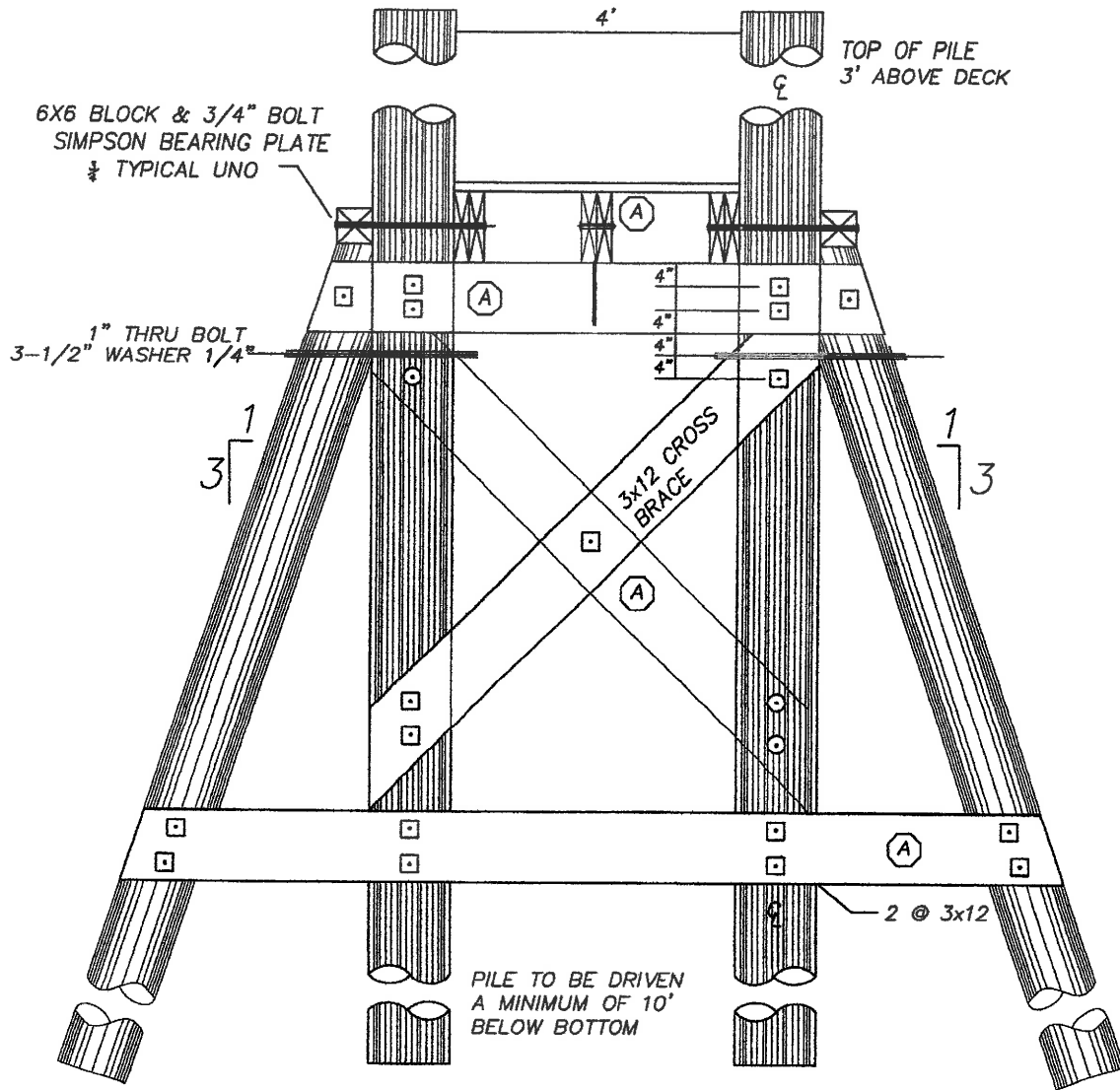
PROPOSED RESIDENTIAL PIER FOR:
JONATHAN JANIKIES
166 WATERWAY
NARRAGANSETT AP NB, LOT 1
NORTH KINGSTOWN, AP 1, LOT 148
BY: WARREN HALL, CIVIL ENGINEER
APRIL 2, 2020 SHEET 7 OF 10



COASTAL RESOURCES
MANAGEMENT COUNCIL

(A) 3x12: 3-1/2"x11-7/8" POWER LAM BEAMS
 F_b=2400psi, E=1,800,000psi, F_v=300psi

ALL PILES SHALL BE GREENHEART
 UNLESS NOTED



TRANSVERSE SECTION PILE BENT
 3/8"=1'-0"

PROPOSED RESIDENTIAL PIER FOR:
 JONATHAN JANIKIES
 166 WATERWAY
 NARRAGANSETT AP NB, LOT 1
 NORTH KINGSTOWN, AP 1, LOT 148
 BY: WARREN HALL, CIVIL ENGINEER
 APRIL 2, 2020 SHEET 8 OF 10

WARREN F. HALL

REGISTERED PROFESSIONAL ENGINEER

RECEIVED

APR 10 2020

COASTAL RESOURCES
 MANAGEMENT COUNCIL

3" SC 80
STEEL PIPE
WELD 2 @ 1x12" BOLTS
TO PIPE, PRE DRILL WOOD
PILE TO ACCEPT BOLTS
SEE PLAN FOR LOCATION

HI PRESSURE GROUT FORCED
THROUGH ANNULUS BETWEEN
3" PIPE AND 1-1/2" PIPE

LEDGE

(1"x12")
DOCK WASHER
12"

(1"x12")
DOCK WASHER
6"

10" PILE TIP

1-1/2" SC. 40 PIPE
1-1/8" DRILL STEEL

SET PINS (THREADED)

4'

HI PRESSURE GROUT FORCED
THROUGH ANNULUS BETWEEN
DRILL STEEL & 1-1/2" STEEL
PIPE, GROUT THEN FORCED INTO
ANNULUS BETWEEN STEEL PIPE &
LEDGE FORMATION

2" CARBIDE STEEL ROCK DRILL BIT
(TO REMAIN IN PLACE)

MUD LINE

10'

COFFERDAM AS
NECESSARY TO
PREVENT MUD
FROM ENTERING

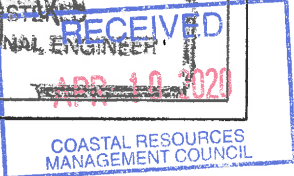
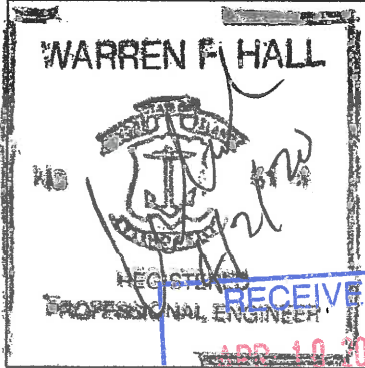
AUGER THROUGH LEDGE
(PILE + 3") SET PILE
AND FILL ANNULUS WITH
RIDOT FILTER STONE
1/2" - 3/8"

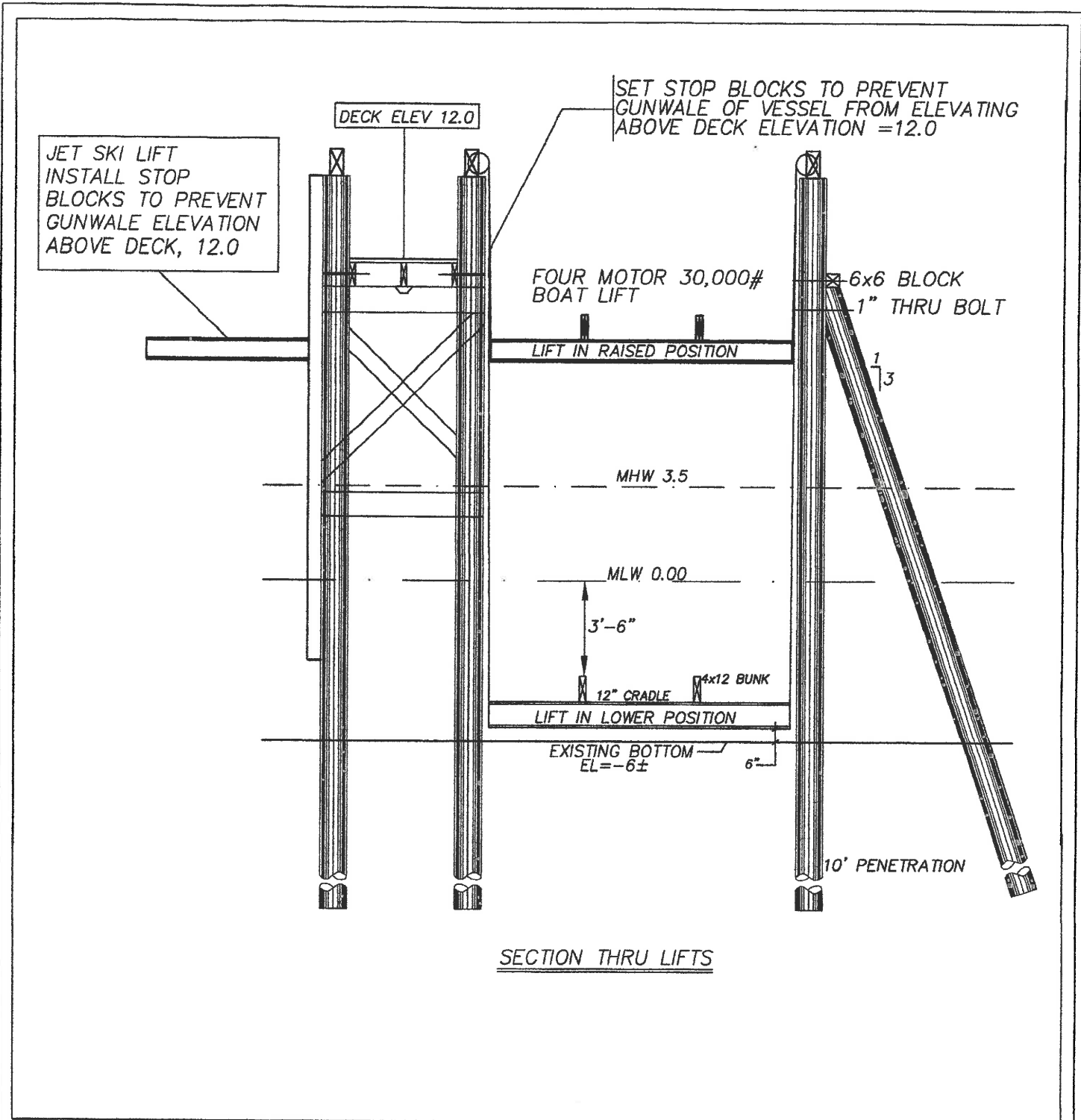
LEDGE ANCHOR

ROCK SOCKET

LEDGE ANCHOR & ROCK SOCKET

JONATHAN JANIKIES
166 WATERWAY
NARRAGANSETT AP NB, LOT 1
NORTH KINGSTOWN, AP 1, LOT 148
BY: WARREN HALL, CIVIL ENGINEER
APRIL 2, 2020 SHEET 9 OF 10





PROPOSED RESIDENTIAL PIER FOR:
 JONATHAN JANIKIES
 166 WATERWAY
 NARRAGANSETT AP NB, LOT 1
 NORTH KINGSTOWN, AP 1, LOT 148
 BY: WARREN HALL, CIVIL ENGINEER
 APRIL 2, 2020 3/16"=1'-0"

SHEET 10 OF 10

WARREN HALL

RECEIVED

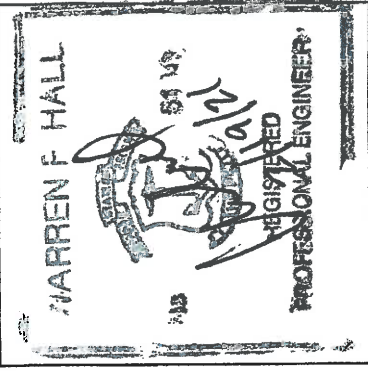
REGISTERED
PROFESSIONAL ENGINEER

APR 10 2020

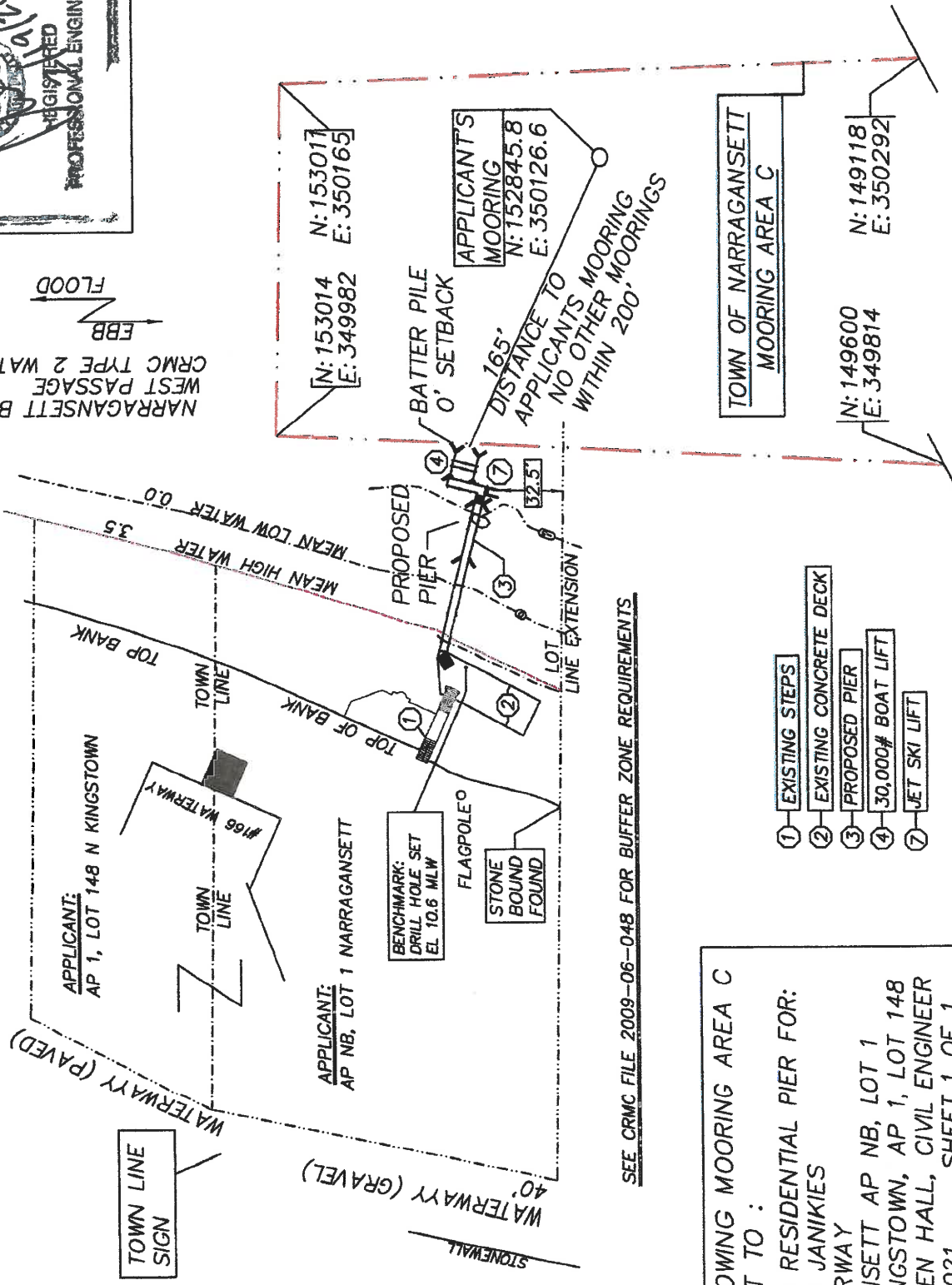
COASTAL RESOURCES
MANAGEMENT COUNCIL



Scale 1" = 80'



NARRAGANSETT BAY
WEST PASSAGE
CRMC TYPE 2 WATER
EBB
FLOOD



SEE CRMC FILE 2009-06-048 FOR BUFFER ZONE REQUIREMENTS

- ① EXISTING STEPS
- ② EXISTING CONCRETE DECK
- ③ PROPOSED PIER
- ④ 30,000# BOAT LIFT
- ⑦ JET SKI LIFT

PLAN SHOWING MOORING AREA C
ADJACENT TO :
PROPOSED RESIDENTIAL PIER FOR:
JONATHAN JANIKIES
166 WATERWAY
NARRAGANSETT AP NB, LOT 1
NORTH KINGSTOWN, AP 1, LOT 148
BY: WARREN HALL, CIVIL ENGINEER
FEB 19, 2021 SHEET 1 OF 1