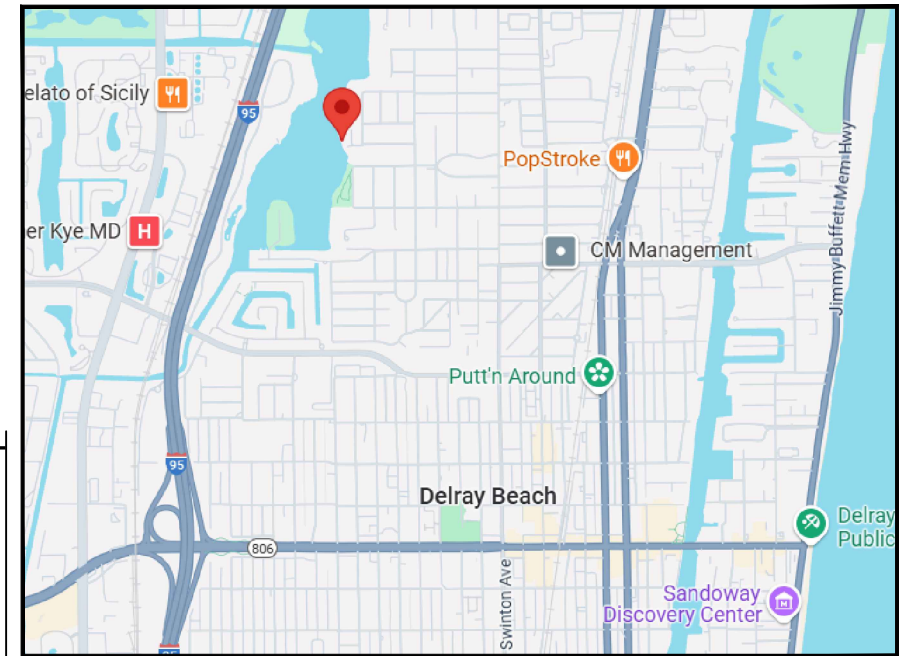




Location Map



See attached survey supplied by owner for exact property information.
No tree will be removed or replanted as part of this permit

PROPERTY DETAIL	
LOCATION ADDRESS	1310 NW 13TH ST
MUNICIPALITY	DELRAY BEACH
PARCEL CONTROL NUMBER	12-43-46-08-52-000-0010
SUBDIVISION	LAKE IDA ESTATES
OFFICIAL RECORDS BOOK/PAGE	31159 / 1238
SALE DATE	01/09/2020
LEGAL DESCRIPTION	LAKE IDA ESTATES LT 1

Project Engineer
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Contractor
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(954) 210-4392

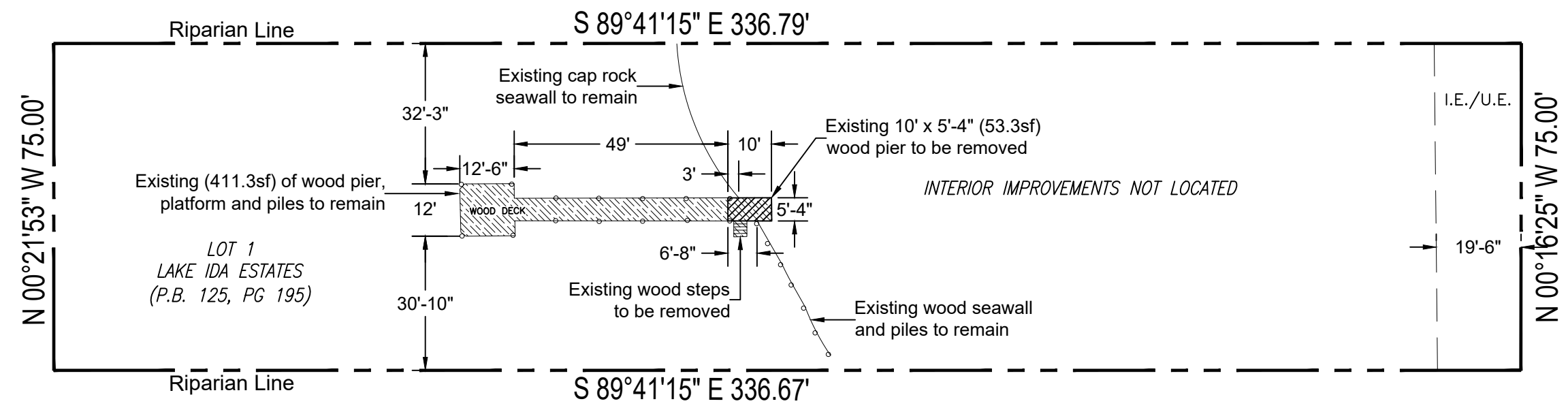
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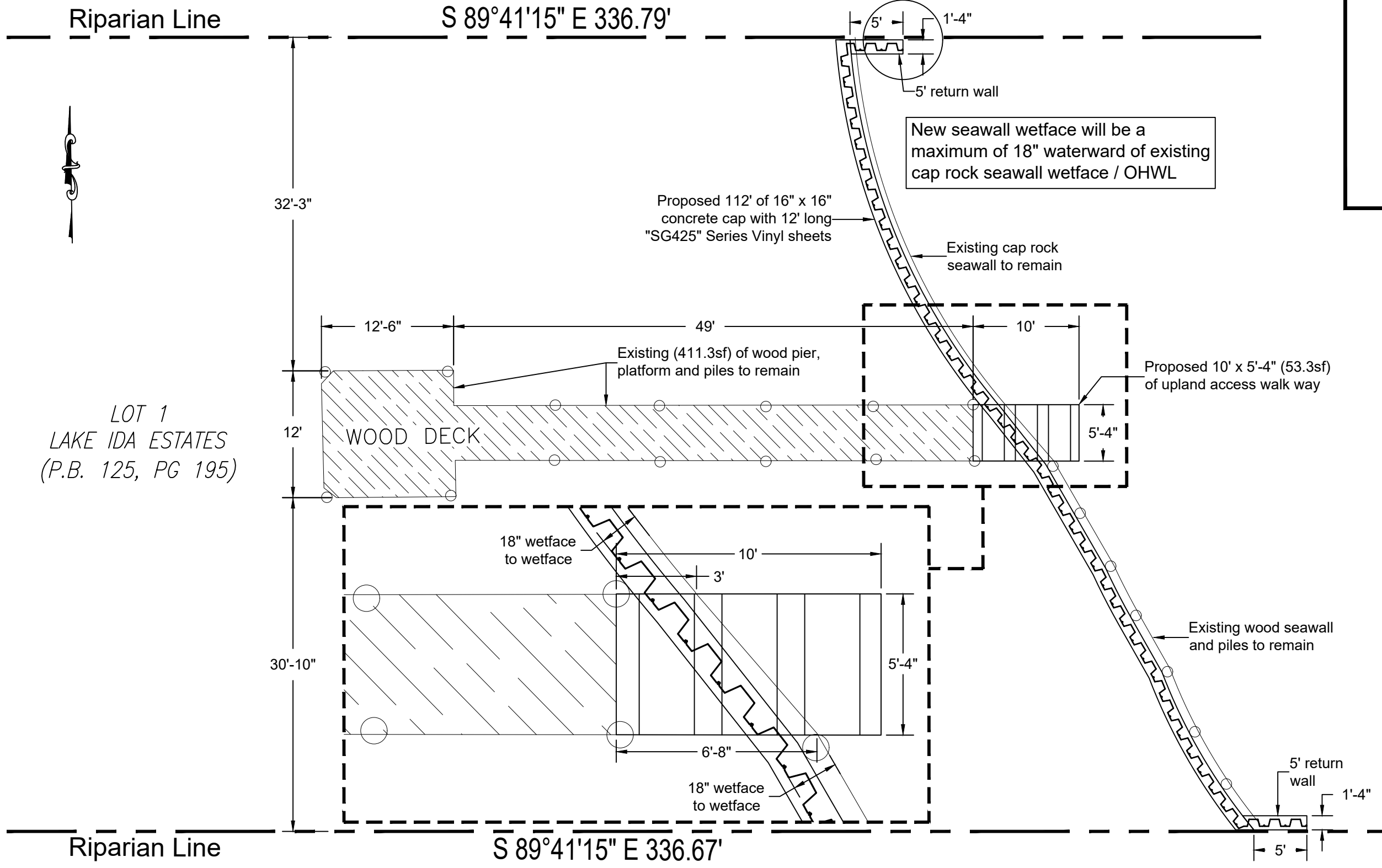
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Existing Site Plan
Scale: 1" = 20'



LOT 1
LAKE IDA ESTATES
(P.B. 125, PG 195)

New seawall wetface will be a maximum of 18" waterward of existing cap rock seawall wetface / OHWL

Proposed Site Plan

Scale: 1" = 10'

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DOCK NOTE IDENTIFICATION:

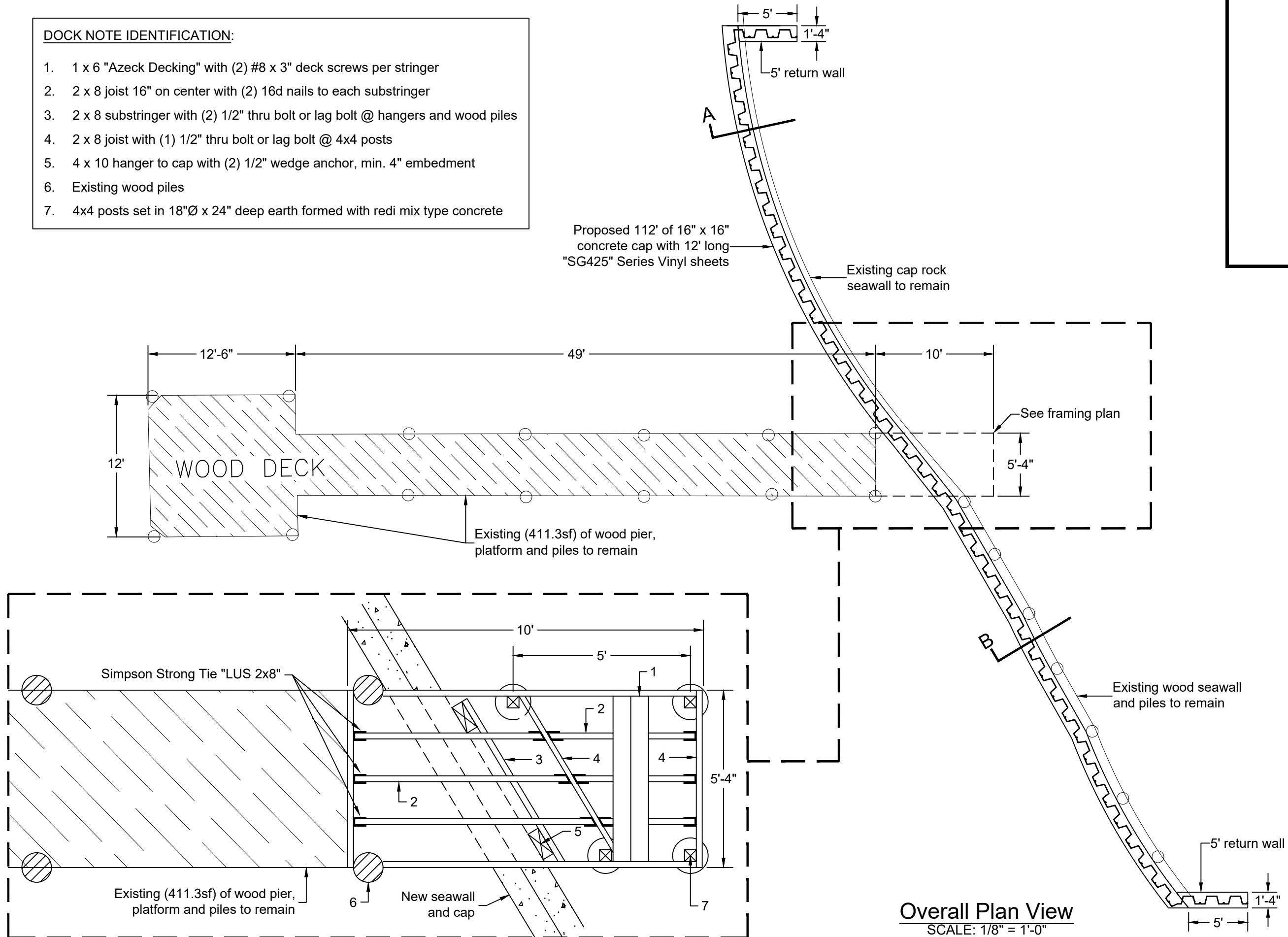
1. 1 x 6 "Azeck Decking" with (2) #8 x 3" deck screws per stringer
2. 2 x 8 joist 16" on center with (2) 16d nails to each substringer
3. 2 x 8 substringer with (2) 1/2" thru bolt or lag bolt @ hangers and wood piles
4. 2 x 8 joist with (1) 1/2" thru bolt or lag bolt @ 4x4 posts
5. 4 x 10 hanger to cap with (2) 1/2" wedge anchor, min. 4" embedment
6. Existing wood piles
7. 4x4 posts set in 18"Ø x 24" deep earth formed with redi mix type concrete

Proposed 112' of 16" x 16" concrete cap with 12' long "SG425" Series Vinyl sheets

Existing cap rock seawall to remain

See framing plan

Existing wood seawall and piles to remain



Overall Plan View
SCALE: 1/8" = 1'-0"

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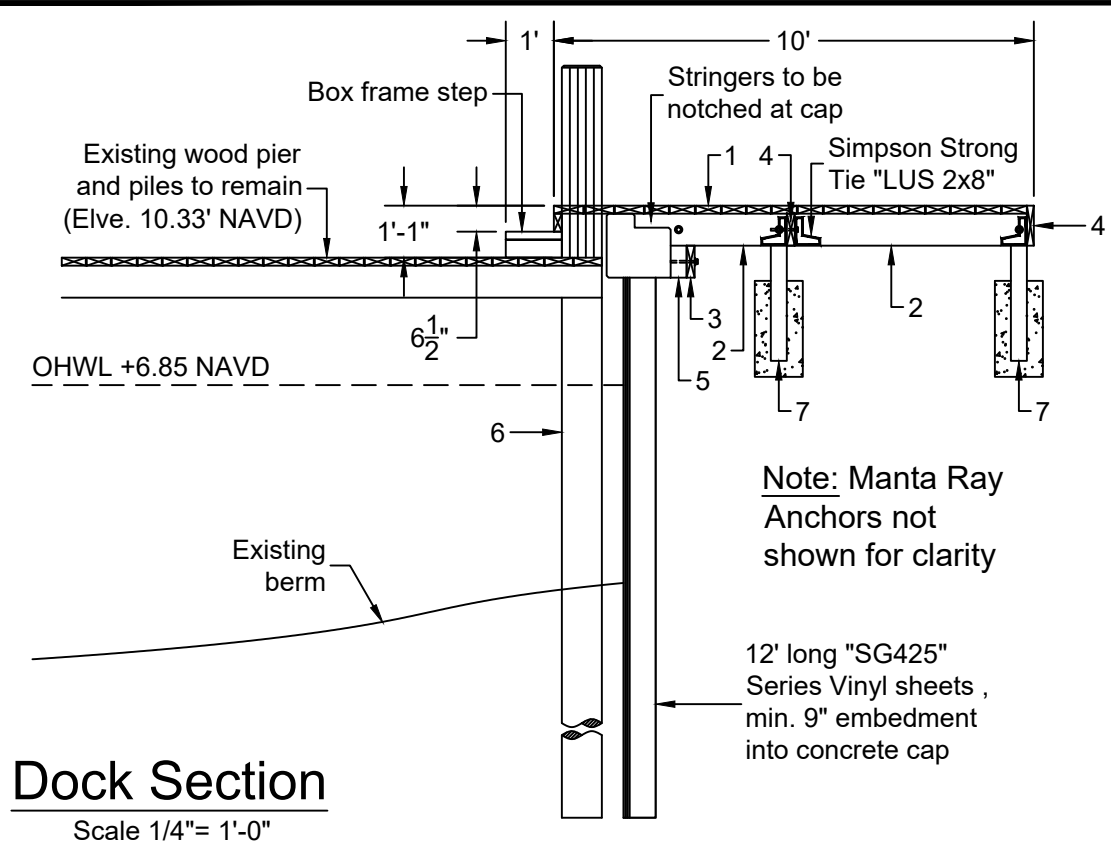
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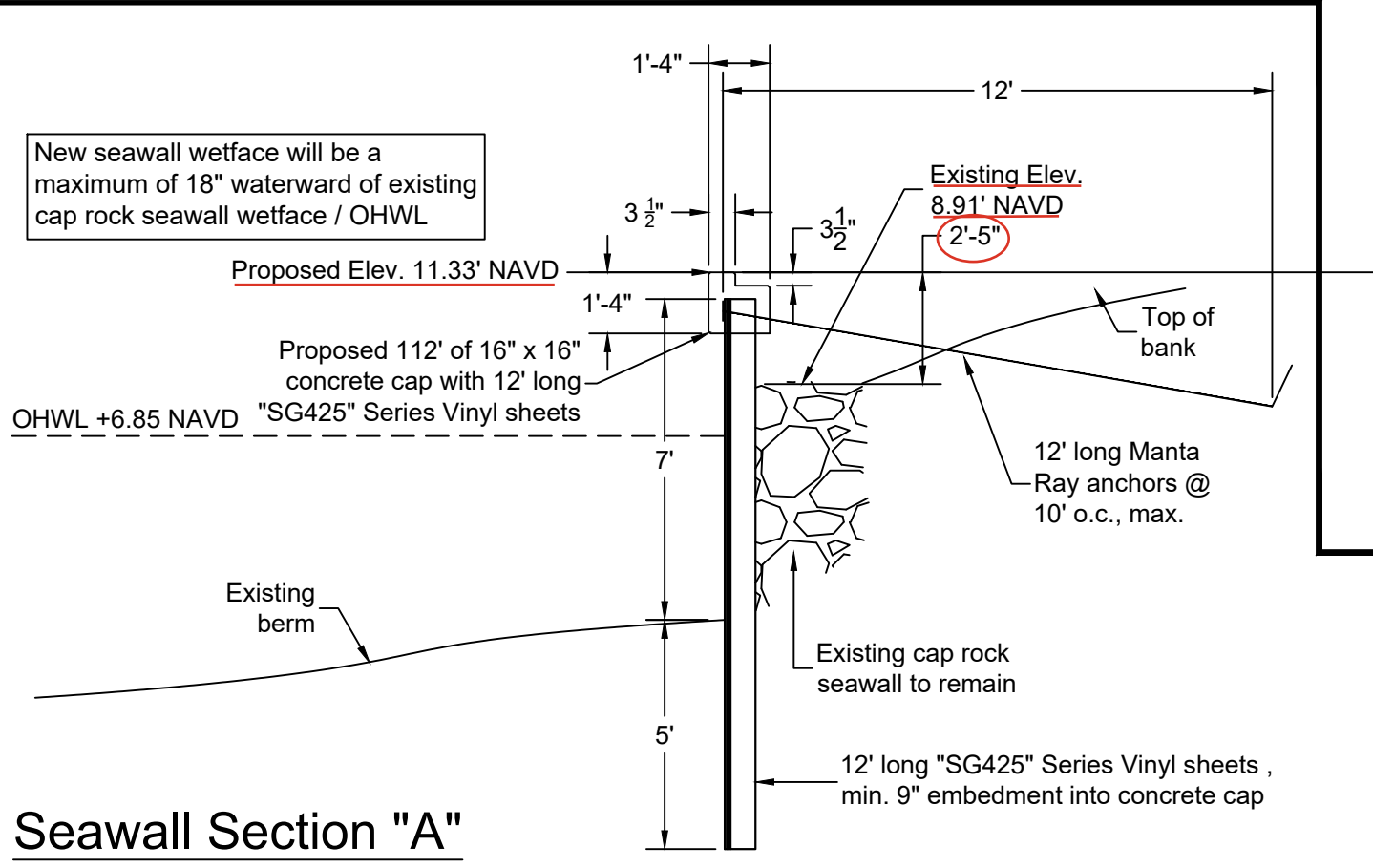
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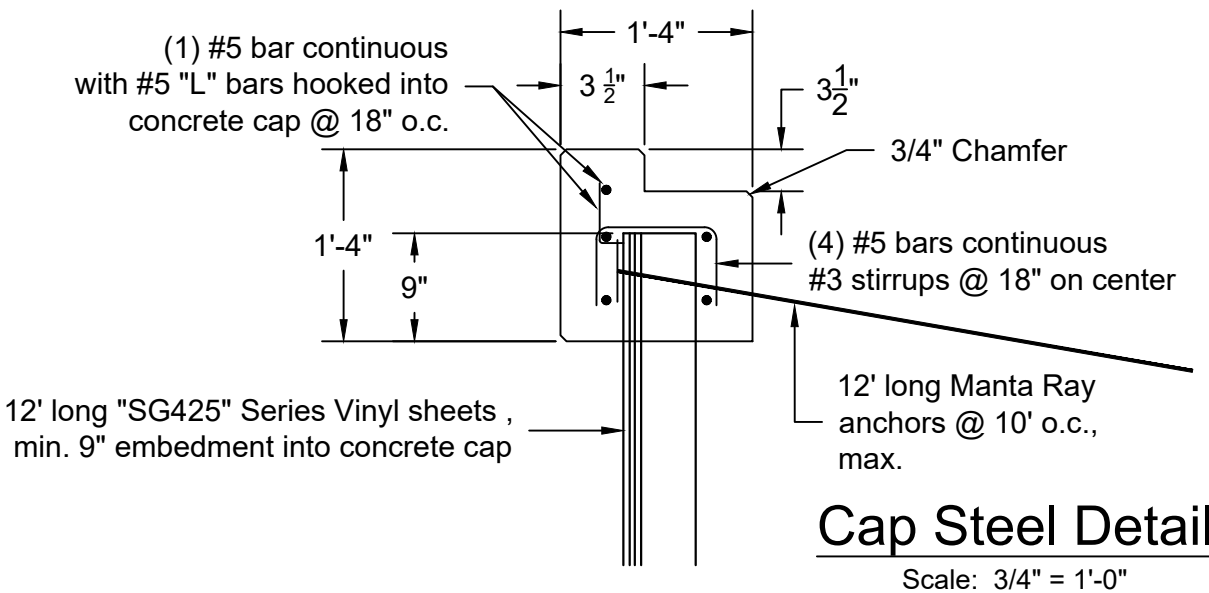


Dock Section
Scale 1/4" = 1'-0"

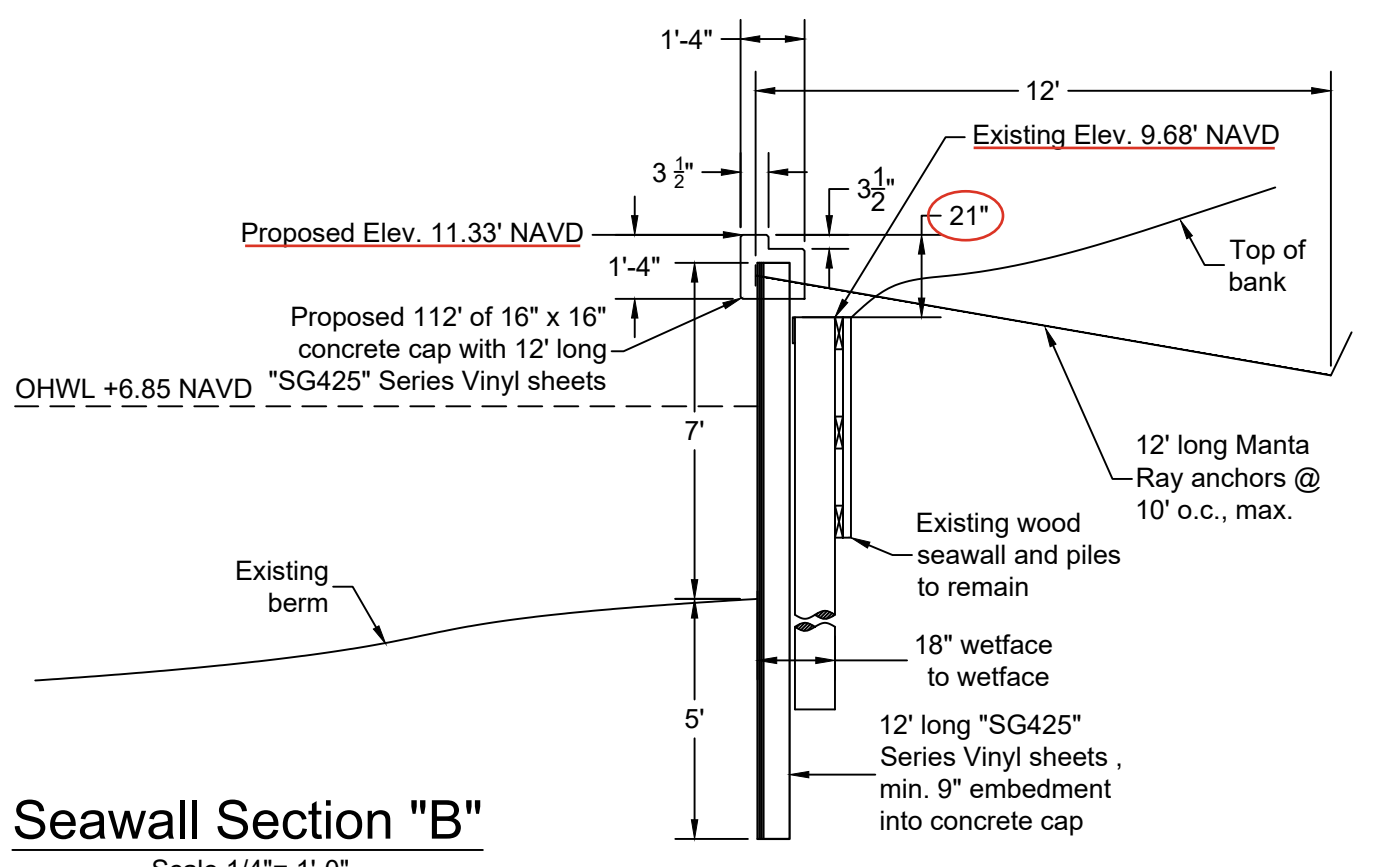


Seawall Section "A"
Scale 1/4" = 1'-0"

- DOCK NOTE IDENTIFICATION:**
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 2. 2 x 8 joist 16" on center with (2) 16d nails to each substringer
 3. 2 x 8 substringer with (2) 1/2" thru bolt or lag bolt @ hangers and wood piles
 4. 2 x 8 joist with (1) 1/2" thru bolt or lag bolt @ 4x4 posts
 5. 4 x 10 hanger to cap with (2) 1/2" wedge anchor, min. 4" embedment
 6. Existing wood piles
 7. 4x4 posts set in 18"Ø x 24" deep earth formed with redi mix type concrete



Cap Steel Detail
Scale: 3/4" = 1'-0"



Seawall Section "B"
Scale 1/4" = 1'-0"

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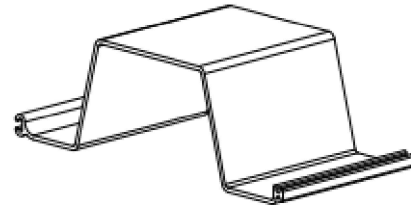
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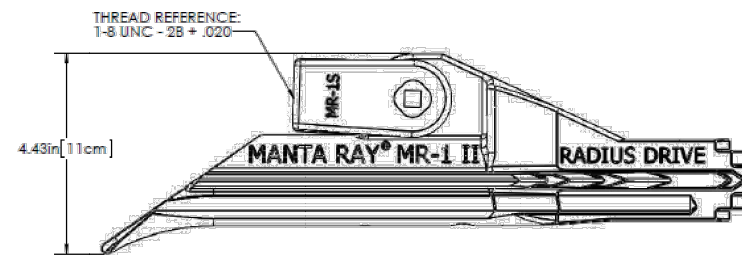
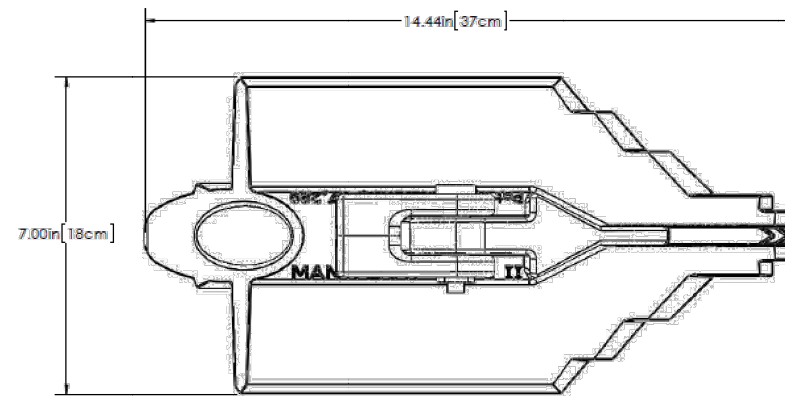
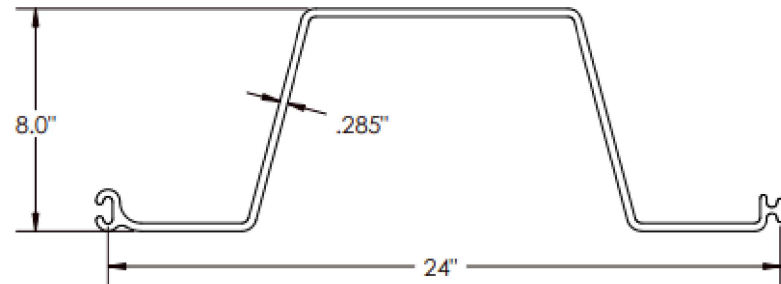
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SG-425



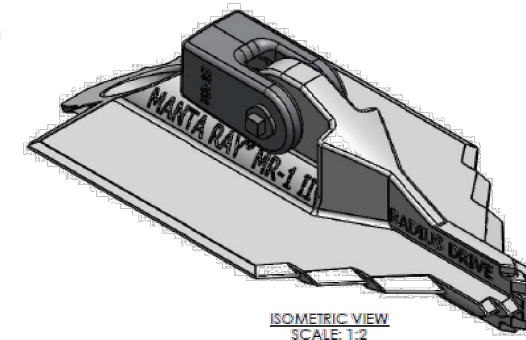
Allowable Moment (M)*	3,813 ft-lb/ft	16.96 kN-m/m
Section Modulus (Z)	14.3 in ³ /ft	769 cm ³ /m
Moment of Inertia (I)	57 in ⁴ /ft	7,784 cm ⁴ /m
Impact Strength**	456 in-lbs	51.52 N-m
Thickness (t)	0.285 in	7.2 mm
Section Depth	8.0 in	203 mm
Section Width	24 in	610 mm
Material	Weatherable Rigid Vinyl	
Cap Compatibility	AW-850, AW-850 STR, VersaCap® 8.5	
Standard Colors	Grey, Clay	
Technology	Box Profile, I-Beam Lock®, XCR™	
Standard Packaging	20 sheets/bundle	

* based on a 3200 psi allowable stress per ASTM D8427-21 and USACE EM 1110-2-2502
 ** based on a 1600 in-lbs/in impact strength normal to the sheet per ASTM D4226



NOTES: UNLESS OTHERWISE SPECIFIED:

- 1) MECHANICAL ULTIMATE CAPACITY: 40,000 LBS [177.9kN]
- 2) MAXIMUM WORKING LOAD: UP TO 27,000 LBS [120.1 kN]
(THIS VALUE IS SOIL AND ANCHORING DEPENDANT)
- 3) AVERAGE WEIGHT: 12.3 LBS [5.6 kg]
- 4) FINISH: HOT DIP GALVANIZED



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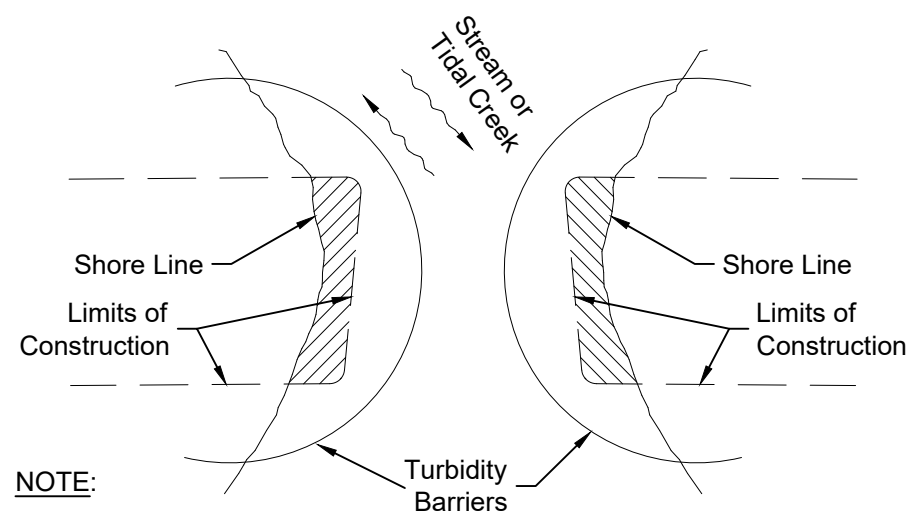
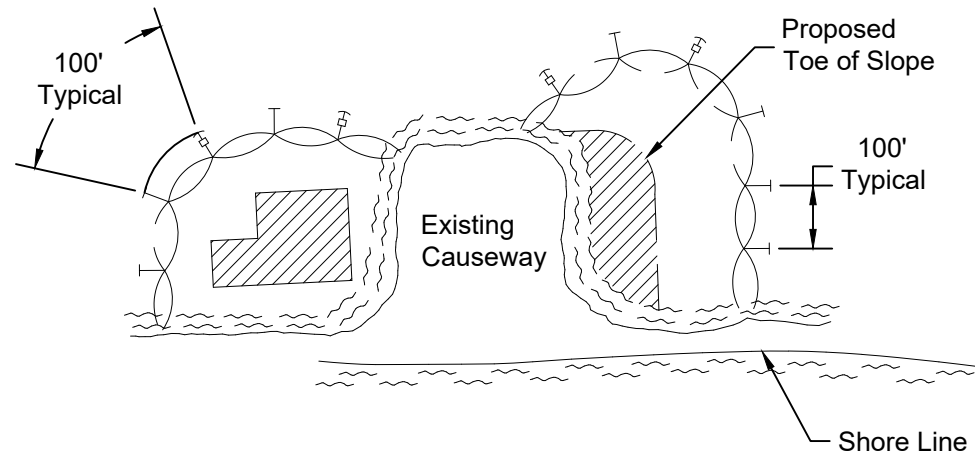
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


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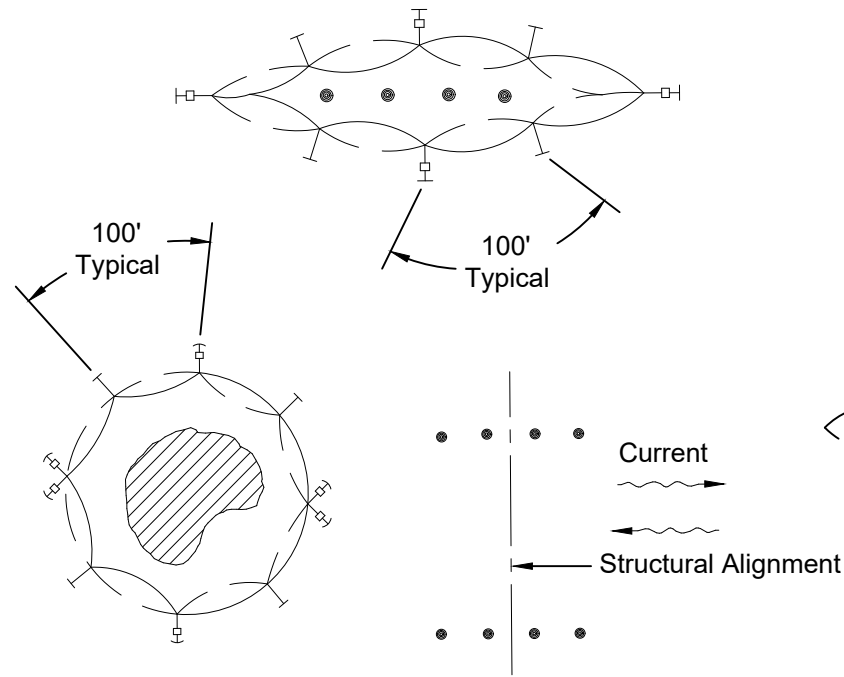


NOTE:

Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractor's option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer of Record.

LEGEND

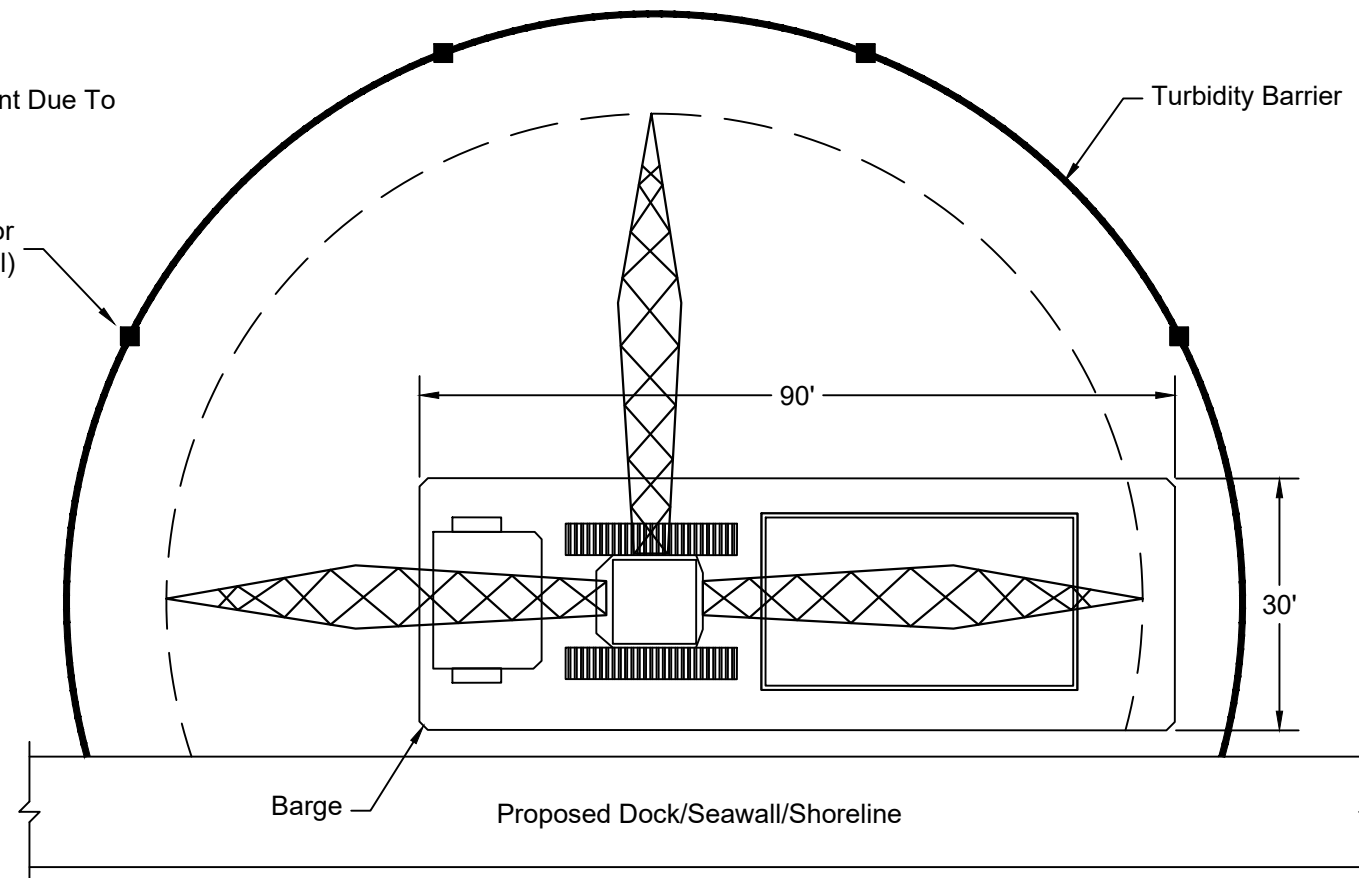
-  Pile Locations
-  Dredge or Fill Area
-  Mooring Buoy with Anchor
-  Anchor
-  Barrier Movement Due To Current Action



NOTES:

1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the Standard Specifications.

Stake or Anchor every 100' (typical)



TURBIDITY BARRIER APPLICATIONS

Project Engineer

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GENERAL NOTES:

Construction to follow the Florida Building Code 8th Edition (2023) and amendments as applicable and all Local, State and Federal Laws.

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.

Do not scale drawings for dimensions.

Any deviation and/or substitution from the information provided herein shall be submitted to the Engineer for approval prior to commencement of work.

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.

All new work and/or materials shall conform to all requirements of each administrative body having jurisdiction in each appertaining circumstance.

All new materials and/or patchwork shall be provided to match existing materials and/or adjoining work where practical except as specifically noted herein.

Licensed Contractor to shall use all possible care to protect all existing materials, surfaces, and furnishings from damage during all phases of construction.

Licensed Contractor to verify location of existing utilities prior to commencing work.

The Licensed contractor to install and remove all shoring and bracing as required for the proper execution of the work.

Licensed Contractor to obtain all permits as necessary from all Local, State, and Federal agencies.

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.

It is the responsibility of the owner's engineer to provide site observation and inspections in order for the owner's engineer to execute the "Engineers Certification of Completion" Exactly as stated on page C-14 from the City of Delray Beach Current Minimum Construction Standards and Specifications.

Any damage to any roadway pavement like utility cuts or edge repair shall be milled and resurfaced for 50' each way past the limit of the damage per City of Delray Beach Standard Detail GU 1.0.

Any trees or shrubs placed within water, sewer or drainage easements shall conform to the City of Delray Beach Standard Details; LD 1.0 & LD 2.0

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 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 318-19 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. Fiber Reinforced Polymer (FRP) Reinforcing Bars may be used in lieu of reinforcing steel. FRP shall meet FDOT specification 932-3.1 - Use only solid, round, thermoset basalt fiber reinforced polymer (BFRP), glass fiber reinforced polymer (GFRP) or carbon fiber reinforced polymer (CFRP) reinforcing bars from producers currently on the FDOT's Production Facility Listing.
7. 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.
8. 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. ACQ treated in accordance with the Florida Building Code.
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 12"x18" 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.

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