

**PROJECT LOCATION**

RE: 00355810-000000  
LOT 37, BLOCK 1,  
AMENDED PLAT OF FLAMINGO ISLAND ESTATES  
BOOT KEY  
P.B. 5, PG. 121  
SEC. 15, TWP. 66S, RGE. 32E  
LAT.: 24.701539°N LONG.: 81.085076°W

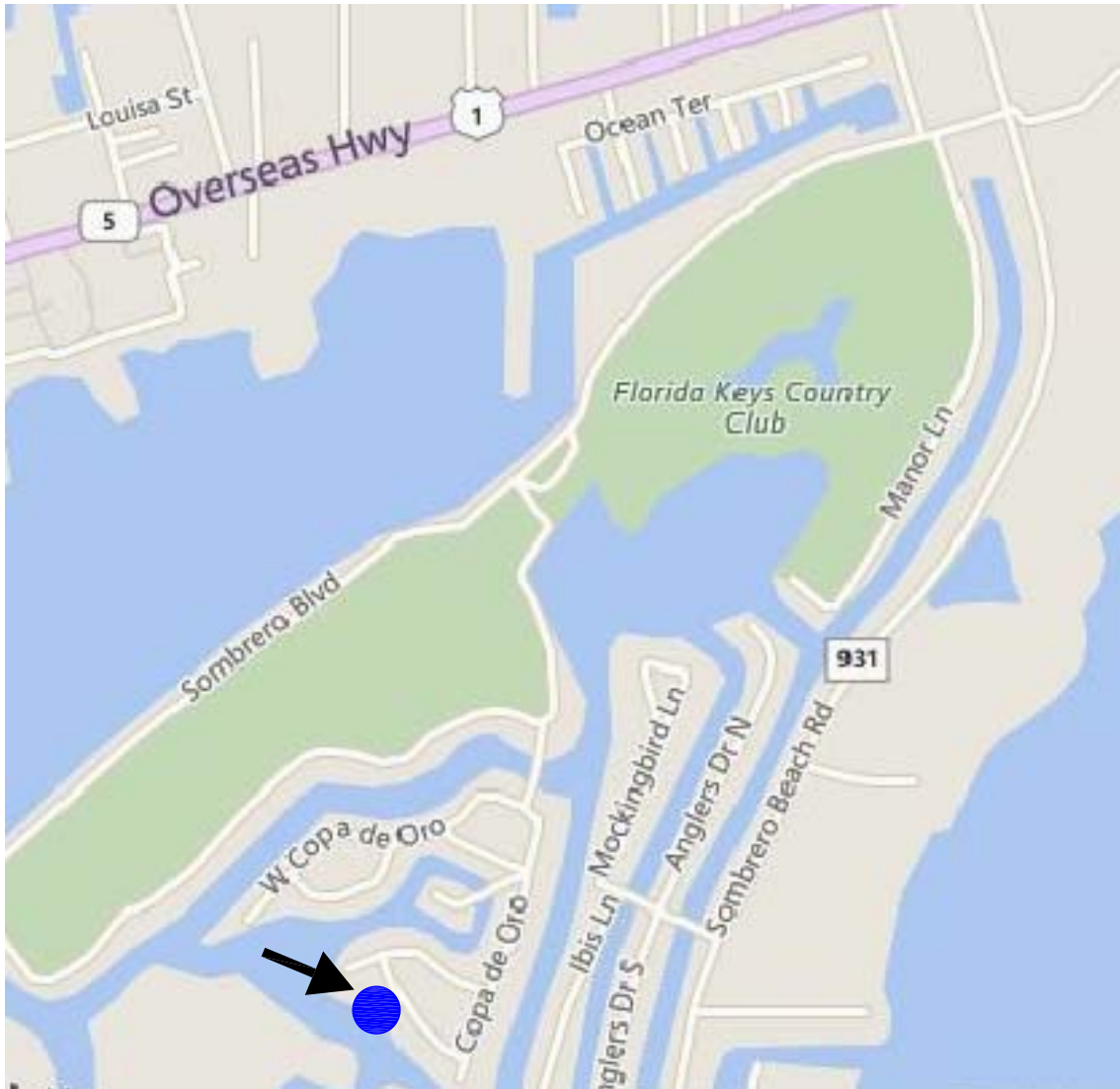
**DIRECTIONS:**

U.S. HIGHWAY NO. 1 SOUTH TO MM 52±. LEFT ONTO  
SOMBRERO BEACH RD. LEFT ONTO COPA D'ORO.  
LEFT ONTO COPA D'ORO EAST. RIGHT ONTO SAGUARO LN.  
PROJECT SITE: ADJACENT TO 984 OCOTILLO LANE.

**ADJOINING OWNERS**

HECTOR & MARIA SARDINA  
(LOT 39, BLOCK 1)  
984 OCOTILLO LANE  
MARATHON, FL 33050

THOMAS G. & KAREN A. SHAURETTE  
105 SAGUARO LN  
MARATHON, FL 33050-2476



REVISIONS:

LOCATION & VICINITY MAP  
SCALE: AS SHOWN

FILL FOR RESIDENCE, DOCK & BOAT LIFT  
FOR BRIAN VAN BOWER  
MARATHON, MONROE COUNTY, FL

GLEN BOE AND ASSOCIATES, INC. # 4061  
5800 OVERSEAS HIGHWAY, SUITE 4, MARATHON, FL 33050  
Telephone (305) 743-9121 Fax (305) 743-9197  
Email: glenboe@bellsouth.net

DATE: 01/03/17



**CANAL**  
(NAVIGABLE WIDTH 105'±  
FACE OF DOCK TO MANGROVES)

APPROXIMATE 25% WIDTH  
OF WATERWAY

PROPOSED 15K ELEVATOR BOAT LIFT  
(ENGINEERING BY MANUFACTURER)

PROPOSED 5'x60' DOCK W/  
4'x60' ACCESS WALK, 540±SF  
(SEE FRAMING PLAN & SECTION  
FOR CONSTRUCTION DETAILS)

APPROXIMATE LIMIT  
OF MANGROVE ROOTS

PLAT LINE  
APPROX.  
MHWL

45' ± TO APPROX. MHWL  
55' PLAT  
85' PLAT

105' ± TO APPROX. MHWL  
115' PLAT

HATCHING INDICATES CORPS  
AVOIDED AREA 3,175±SF

LOT 36

80' PLAT

PROPOSED  
RESIDENCE

LOT 39

LOT 38

LOT 37  
BLOCK 1


GRAVEL  
DRIVEWAY

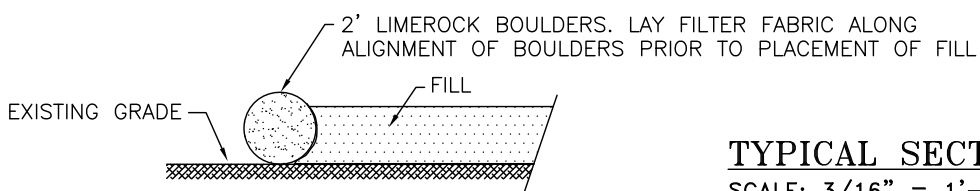
SHADING INDICATES AREA  
FOR PROPOSED FILL  
7,430±SF, 300±CY  
PROVIDE BOULDER  
RETAINING WALL TO  
RETAIN FILL.

A=45.35'  
R=275.00'

16.52' PLAT

SAGUARO LANE

**SITE PLAN**   
SCALE: 1" = 30'



**TYPICAL SECTION**  
SCALE: 3/16" = 1'-0"

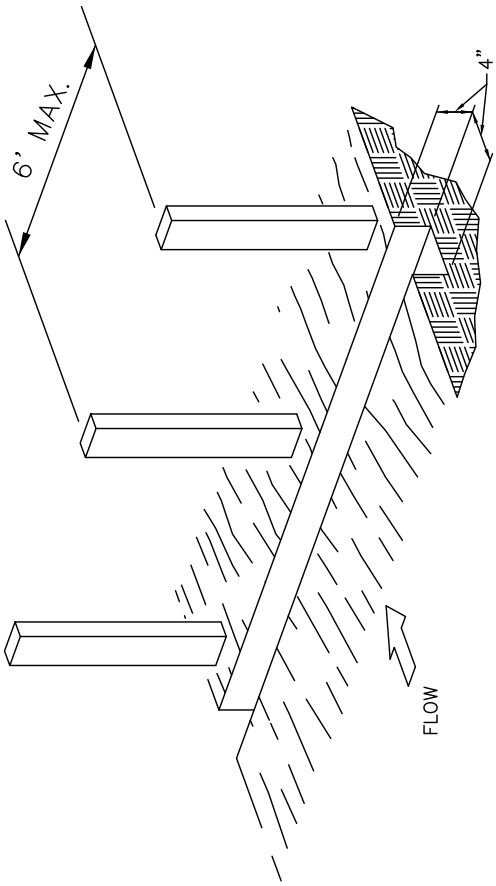
REVISIONS:			

CERTIFIED BY:  
SEAN KIRWAN, P.E. #57506

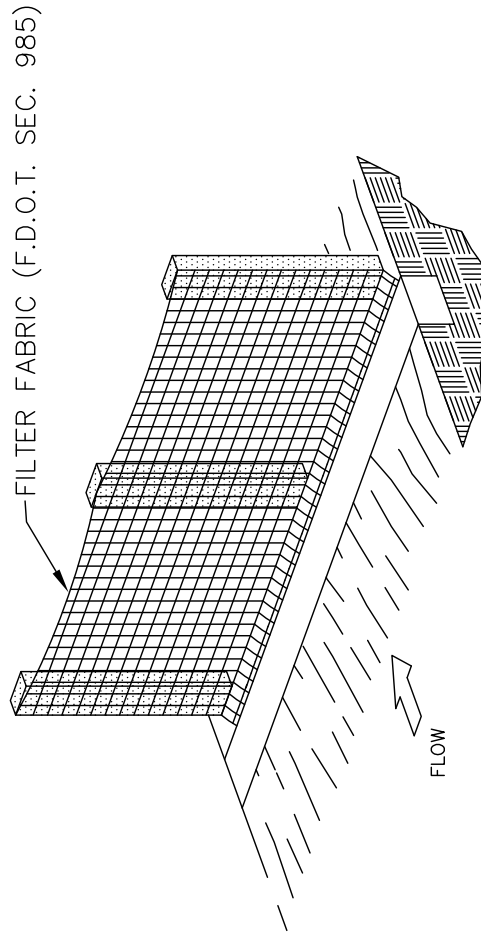
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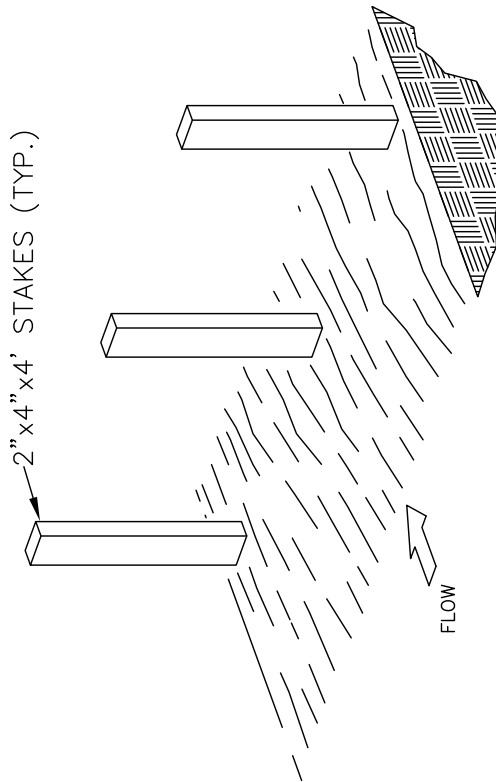
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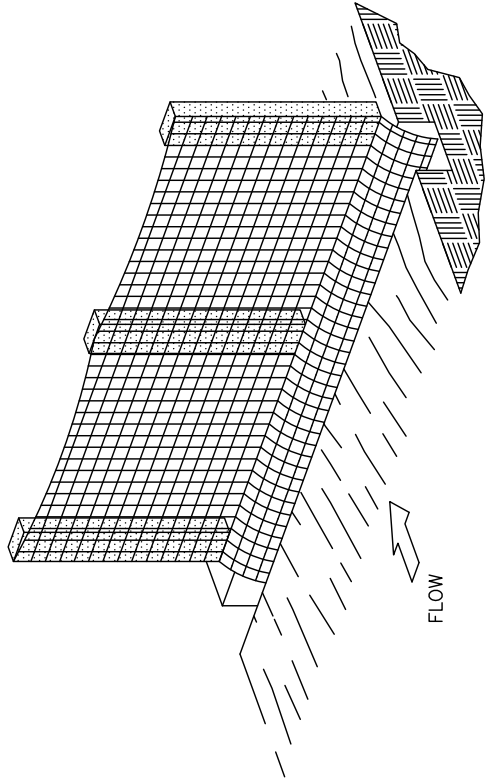
2. EXCAVATE A 4"X4" TRENCH UPSLOPE ALONG THE LINE OF STAKES.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



1. SET THE STAKES



3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.

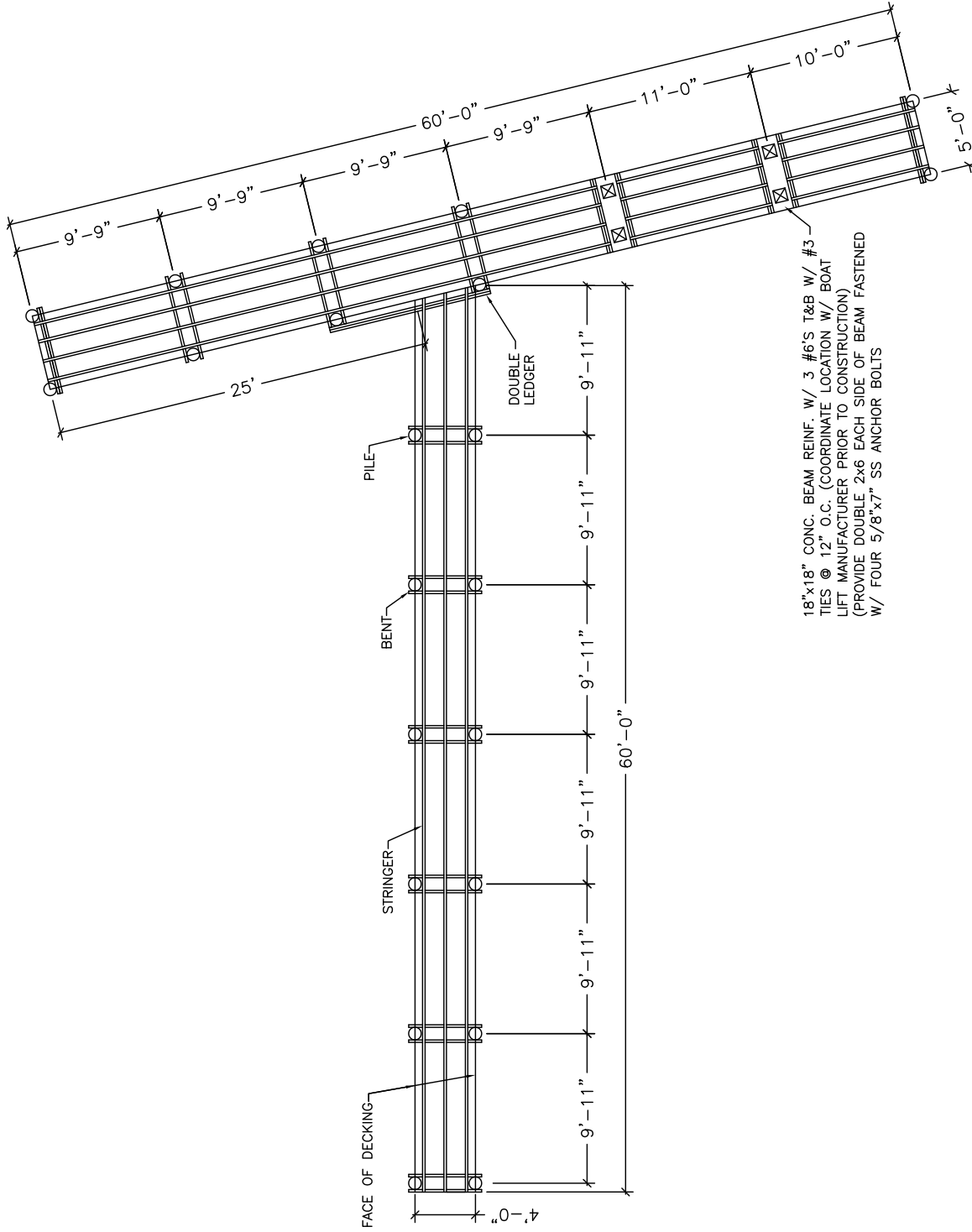
F.D.O.T. TYPE III FILTER FENCE

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**FRAMING PLAN**  
SCALE: 3/32" = 1'-0"

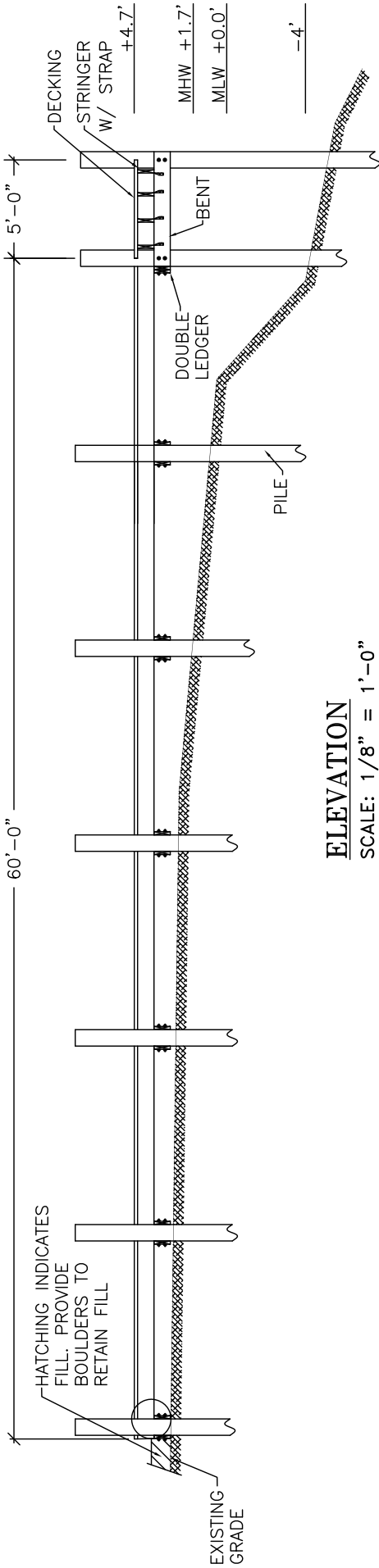
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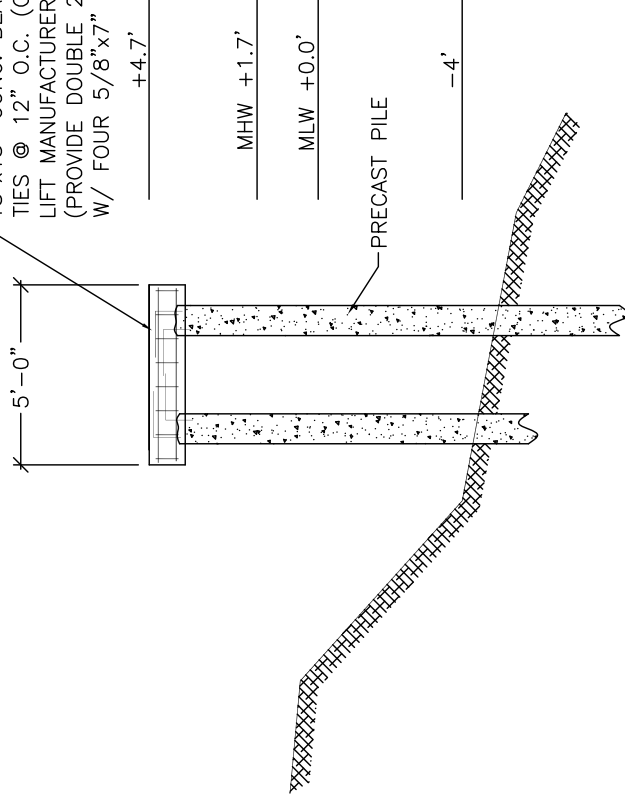
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**ELEVATION**  
SCALE: 1/8" = 1'-0"

18"x18" CONC. BEAM REINF. W/ 3 #6'S T&B W/ #3 TIES @ 12" O.C. (COORDINATE LOCATION W/ BOAT LIFT MANUFACTURER PRIOR TO CONSTRUCTION) (PROVIDE DOUBLE 2x6 EACH SIDE OF BEAM FASTENED W/ FOUR 5/8"x7" SS ANCHOR BOLTS)

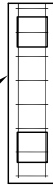


**BOAT LIFT BEAM (SECTION)**  
SCALE: 3/16" = 1'-0"

HATCHING INDICATES FILL. PROVIDE BOULDERS TO RETAIN FILL

EXISTING GRADE

18"x18" CONC. BEAM REINF. W/ 3 #6 REBAR TOP & BOTTOM W/ #3 TIES 12" O.C.



**BOAT LIFT BEAM (PLAN VIEW)**  
SCALE: 3/16" = 1'-0"

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**CONSTRUCTION NOTES:**

1. CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS PRIOR TO COMMENCING WORK. THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE ARMY CORPS OF ENGINEERS & LOCAL REGULATIONS SHALL GOVERN ALL WORK.
2. WORK SHOWN ON DRAWINGS IS DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (LATEST ADDITION). FOLLOW ALL APPLICABLE PROVISIONS FOR ALL PHASES OF CONSTRUCTION.
3. THE PROPOSED STRUCTURE(S) IS DESIGNED FOR A LIVE LOAD OF 40 PSF. WIND LOADS ARE DESIGNED PER THE FLORIDA BUILDING CODE.
4. CONTRACTOR SHALL ADHERE TO THE STANDARD MANATEE CONSTRUCTION CONDITIONS (LATEST ADDITION). IF NEEDED, THE CONTRACTOR CAN CONTACT THE ARMY CORPS OF ENGINEERS OR THIS OFFICE TO OBTAIN A COPY OF THE STANDARD MANATEE CONSTRUCTION CONDITIONS.
5. BEST MANAGEMENT PRACTICES, INCLUDING THE USE OF TURBIDITY SCREENS, ARE REQUIRED TO ISOLATE THE CONSTRUCTION AREA FROM THE ADJACENT WATERS. CONTRACTOR SHALL INSTALL TURBIDITY SCREENS AROUND THE IMMEDIATE PROJECT AREA PRIOR TO CONSTRUCTION. THE TURBIDITY SCREENS REMAIN IN PLACE UNTIL WATER QUALITY CONDITIONS RETURN TO PRECONSTRUCTION CONDITIONS. WATER QUALITY MONITORING SHALL ADHERE TO STATE REGULATIONS.
6. ELECTRIC & WATER (DESIGN PROVIDED BY OTHERS UNLESS SHOWN) SHALL BE PROVIDED. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF ALL PROPOSED UTILITIES WITH OWNER PRIOR TO CONSTRUCTION.
7. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS & WATER DEPTHS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
8. THE STRUCTURAL INTEGRITY OF THE COMPLETED STRUCTURE DEPENDS ON INTERACTION OF VARIOUS CONNECTED COMPONENTS. PROVIDE ADEQUATE BRACING, SHORING, AND OTHER TEMPORARY SUPPORTS AS REQUIRED TO SAFELY COMPLETE THE WORK.
9. EXERCISE EXTREME CARE AND CAUTION WHEN EXCAVATING AND FILLING ADJACENT TO EXISTING STRUCTURES. UNDER NO CIRCUMSTANCES SHALL THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURES BE IMPAIRED IN ANY WAY BY CONSTRUCTION OPERATIONS AND PROCEDURES. DO NOT EXCAVATE OR DISTURB SOIL ADJACENT TO OR BENEATH EXISTING FOOTINGS.
10. CONTRACTOR SHALL COORDINATE INSTALLATION OF CLEATS, LADDERS, PILE CAPS, AND OTHER DOCK ACCESSORIES WITH OWNER PRIOR TO CONSTRUCTION. ALL DOCK ACCESSORIES SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. STAINLESS STEEL HARDWARE SHALL BE USED FOR ALL CONNECTIONS TO DOCK.
11. FOR OPEN WATER DOCKS PROVIDE REFLECTORS ON EACH SIDE OF WALKWAY EVERY 50' AND ON EACH END OF THE TERMINAL PLATFORM.

**PILES:**

DOCK PILES SHALL BE ROUND SOUTHERN PINE OR DOUGLAS FIR AND SHALL CONFORM TO ASTM D 25, UNUSED, CLEAN PEELED, UNIFORMLY TAPERED, ONE PIECE FROM BUTT TO TIP. PILES SHALL BE PRESSURE TREATED IN CONFORMANCE WITH AWPAC C3 AND C18 FOR MARINE PILES. THE MINIMUM BUTT DIAMETER SHALL BE 10 INCHES, MEASURED AT A SECTION 3 FEET FROM THE END. FOR PILES UP TO 50 FEET IN LENGTH THE MINIMUM TIP DIAMETER SHALL BE 8 INCHES.

BOAT LIFT SUPPORT PILES SHALL BE 10"x10" PRESTRESSED CONCRETE PILES W/ FOUR 7/16" DIAMETER 270K STRANDS @ 21,700# INITIAL PULL (EACH) W/ W3.4 WIRE SPIRAL TIES. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 5000 PSI. CONCRETE SHALL BE FDOT CLASS V SPECIAL. ALL REINFORCING STEEL, EXCEPT SPIRAL TIES, SHALL BE ASTM A615, GRADE 60. SPIRAL TIES SHALL BE HARD DRAWN BASIC WIRE IN ACCORDANCE WITH ASTM A-82. EACH WRAP OF SPIRAL SHALL BE TIED TO AT LEAST TWO CORNER STRANDS.

A STRAIGHT LINE DRAWN FROM THE CENTER OF THE BUTT TO THE CENTER OF THE TIP SHALL NOT, AT ANY POINT, FALL FURTHER AWAY FROM THE CENTER OF THE PILE THAN A DISTANCE EQUAL TO 1% OF THE LENGTH OF THE PILE.

PILES SHALL BE SET IN PREDRILLED OR PREPUNCHED HOLES AND DRIVEN TO PENETRATE FIRM ROCK 7' MIN.

PILES SHALL BE SPACED @ MAXIMUM OF 10' O.C. UNLESS OTHERWISE SHOWN.

DO NOT DRIVE PILES WITHIN 20 FEET OF CONCRETE LESS THAN SEVEN DAYS OLD.

CONTRACTOR SHALL INVESTIGATE ANY SUDDEN DECREASE IN DRIVING RESISTANCE FOR POSSIBLE BREAKAGE OF THE PILE. IF SUDDEN DECREASE IN DRIVING RESISTANCE CANNOT BE CORRELATED TO BORING DATA OR SOME INCIDENT IN THE DRIVING, AND IF THE PILE CANNOT BE INSPECTED, SUCH DECREASE IN DRIVING RESISTANCE MAY BE CAUSE FOR REJECTION OF THE PILE.

RE-DRIVE ANY PILE WHICH IS RAISED DURING DRIVING OF ADJACENT PILES, TO THE ORIGINAL TIP ELEVATION.

HEIGHT OF WOOD PILES SHALL BE FIELD DETERMINED BY OWNER. CUT OFF PILES AT TOP ELEVATION DIRECTED BY THE OWNER. REPLACE OR REPAIR PILES WHICH ARE DAMAGED WHEN CUT OFF.

CUT OFF CONCRETE PILES TO PROVIDE A MINIMUM OF 5" EMBEDMENT INTO CONCRETE CAP. PROVIDE A MINIMUM 30" SPLICE FOR ALL STRANDS.

PILES SHALL DEVIATE FROM PLUMB AND ANGLE OF BATTER NO MORE THAN 1/4 INCH PER FOOT OF PILE LENGTH, BUT NOT MORE THAN 6 INCHES OVERALL. PILES SHALL NOT DEVIATE FROM LOCATION OF PILE TOP MORE THAN 6 INCHES.

WOOD PILES NOT MEETING ASTM D25 REQUIREMENTS WILL BE REJECTED. REMOVE SUCH PILES FROM THE SITE AND REPLACE WITH SOUND PILES. PILES BROKEN UNDER DRIVING STRESSES MAY BE CUT OFF AND LEFT IN PLACE IF APPROVED BY THE DESIGN ENGINEER FOR THE LOCATION. OTHERWISE THEY SHALL BE EXTRACTED AND REMOVED FROM THE SITE.

REMOVE CUTOFF SECTIONS OF PILES FROM THE SITE AND LEGALLY DISPOSE.

**CONCRETE BEAMS**

CAST IN PLACE CONCRETE SHALL BE TYPE II CONCRETE WITH A COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS. MAXIMUM WATER-CEMENTIOUS MATERIALS RATIO BY WEIGHT RATIO SHALL BE 0.40. SLUMP SHALL NOT EXCEED 5" (1"±).

REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A 615, GRADE 60. ALL DETAILING AND ACCESSORIES TO CONFORM TO ACI DETAILING MANUAL (LATEST ADDITION).

PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES.

PROVIDE LIGHT BROOM FINISH ON ALL EXPOSED CONCRETE SLABS.

REINFORCED CONCRETE CONSTRUCTION TO CONFORM TO ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

PROVIDE SLEEVES FOR ALL PIPES, CONDUITS, ETC. THAT PENETRATE CONCRETE STRUCTURAL MEMBERS PRIOR TO PLACEMENT OF CONCRETE. CUTTING OR DRILLING OF HARDENED CONCRETE NOT PERMITTED.

DO NOT EMBED HORIZONTAL CONDUITS, PIPES, ETC., IN HORIZONTAL CONCRETE STRUCTURAL MEMBERS UNLESS SPECIFICALLY SHOWN ON STRUCTURAL DRAWINGS.

REQUIRED CONCRETE COVER FOR REINFORCING STEEL (UNLESS NOTED OTHERWISE):

CONCRETE BEAM - TOP 2" MINIMUM, BOTTOM 3" MINIMUM, SIDES 3" MINIMUM

PROVIDE CHAIRS, SPACERS, TIES, AND ALL DEVICES NECESSARY FOR PROPER PLACING, SPACING, SUPPORTING, AND FASTENING REINFORCEMENT AS REQUIRED BY ACI 315. PROVIDE CHAIRS, SPACERS, BOLSTERS, AND ITEMS IN CONTACT WITH FORMS WITH HOT-DIP GALVANIZED LEGS OR PLASTIC LEGS.

LAP SPLICE CONTINUOUS VERTICAL OR HORIZONTAL BARS IN CONCRETE MEMBERS BY WIRING TOGETHER IN CONTACT IN ACCORDANCE WITH ACI 318, LATEST EDITION, FOR CLASS "B" TENSION LAP SPLICES. DO NOT SPLICE CONTINUOUS TOP BARS IN BEAMS AT ENDS OF CLEAR SPANS. DO NOT SPLICE CONTINUOUS BOTTOM BARS IN BEAMS IN CLEAR SPANS BETWEEN SUPPORTS.

**LUMBER DECKING & FASTENERS:**

ALL BENTS AND STRINGERS SHALL BE SOUTHERN PINE NO. 2 OR DOUGLAS FIR NO. 2. LUMBER SHALL BE PRESSURE TREATED PER AWPAC UC4B SPECIFICATIONS. MINIMUM RETENTION OF CCA SHALL BE 0.60 POUNDS/CUBIC FOOT.

ALL DECKING SHALL BE SOUTHERN PINE NO. 1 OR DOUGLAS FIR NO. 1 WITH ROUNDED EDGES. LUMBER SHALL BE PRESSURE TREATED. MINIMUM RETENTION OF ACQ SHALL BE 0.40 POUNDS/CUBIC FOOT.

STRINGERS: 2x10

BENTS: 2x10

DECKING: 2x6 (1/2" SPACING)

ATTACH DECKING TO EACH STRINGER WITH TWO #10 3" STAINLESS STEEL DECK SCREWS OR TWO 16d STAINLESS STEEL NAILS AT EACH CONNECTION POINT.

ATTACH BENTS TO PILING WITH TWO 5/8" STAINLESS STEEL BOLTS, WASHERS, AND NUTS AT EACH CONNECTION POINT. BORE HOLES SHALL BE 1/16 INCH GREATER IN DIAMETER THAN THE BOLT. UPON COMPLETION OF THE INSTALLATION, CHECK ALL NUTS FOR TIGHTNESS.

ATTACH STRINGER TO BENT WITH STAINLESS STEEL SIMPSON STRONG-TIE HURRICANE STRAP OR APPROVED EQUAL. ALL CONNECTORS SHALL BE HEAVY DUTY TYPE FOR MARINE ENVIRONMENT APPLICATIONS.

LAY THE PLANKS WITH THE BEST SIDE UP AND WITH ADJACENT EDGES IN CONTACT UNLESS OTHER SPACING SPECIFIED.

PERFORM COUNTERSINKING WHEREVER THE HEADS OF SCREWS OR BOLTS WOULD OTHERWISE INTERFERE WITH THE ASSEMBLY OF THE WORK.

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