

PROJECT LOCATION

RE#00098230-000000
PART GOVERNMENT LOT 2 & FILLED BAYBOTTOM
LONG KEY
SECTION 27, TOWNSHIP 64 SOUTH, RANGE 35 EAST
LATITUDE: 24.837809°N LONGITUDE: 80.798717°W

DIRECTIONS:

U.S. HIGHWAY NO. 1 NORTH TO MM 69.5±. PROJECT
SITE ADDRESS: 69501 OVERSEAS HIGHWAY

ADJOINING OWNERS

LYDIA DE PAPP
P.O. BOX 818
LONG KEY, FL 33001-0818



REVISIONS:

LOCATION & VICINITY MAP
SCALE: AS SHOWN

PIERS, MOORING PILES, WAVE ATTENUATOR,
& DOCKING FACILITY REPAIR FOR SEA BIRD MARINA, INC.
LONG KEY, 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: 04/25/17



EXISTING SITE PLAN
SCALE: 1" = 80'



REVISIONS:	
1	05/22/17

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

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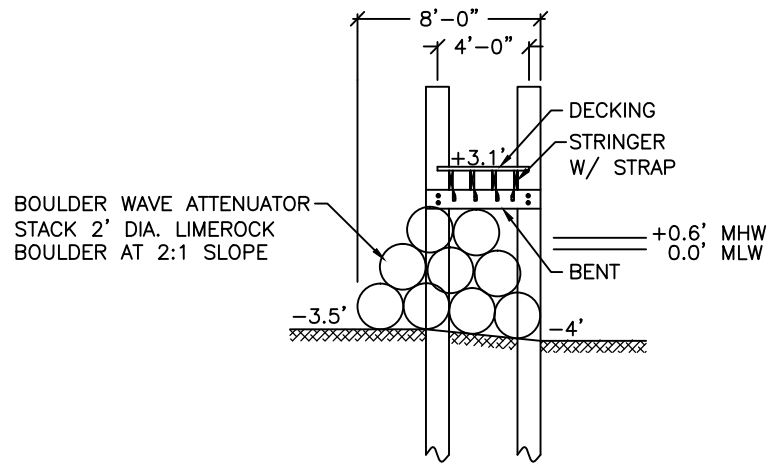
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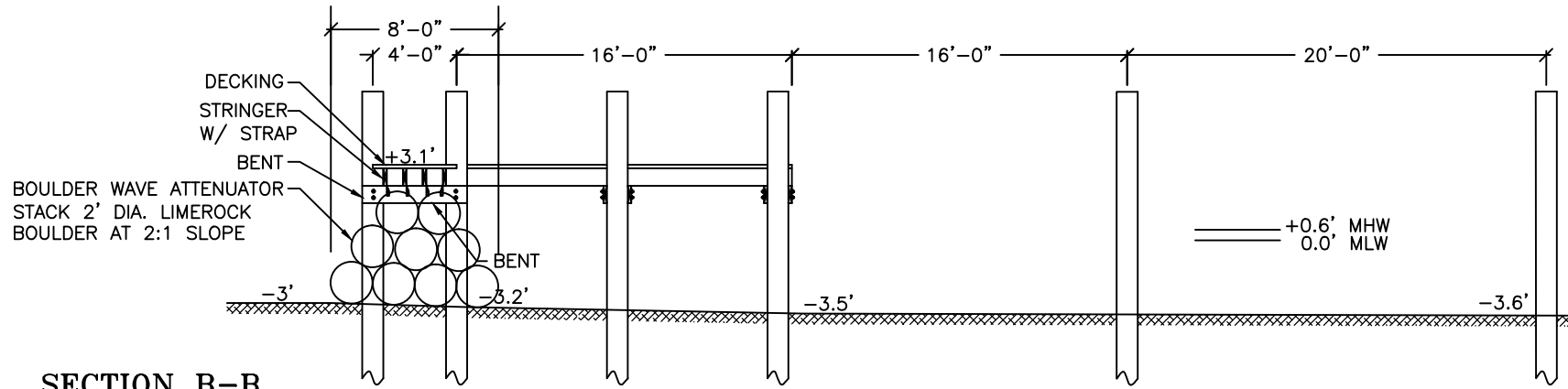
SHEET 3 OF 6

PROPOSED SITE PLAN
SCALE: 1" = 60'

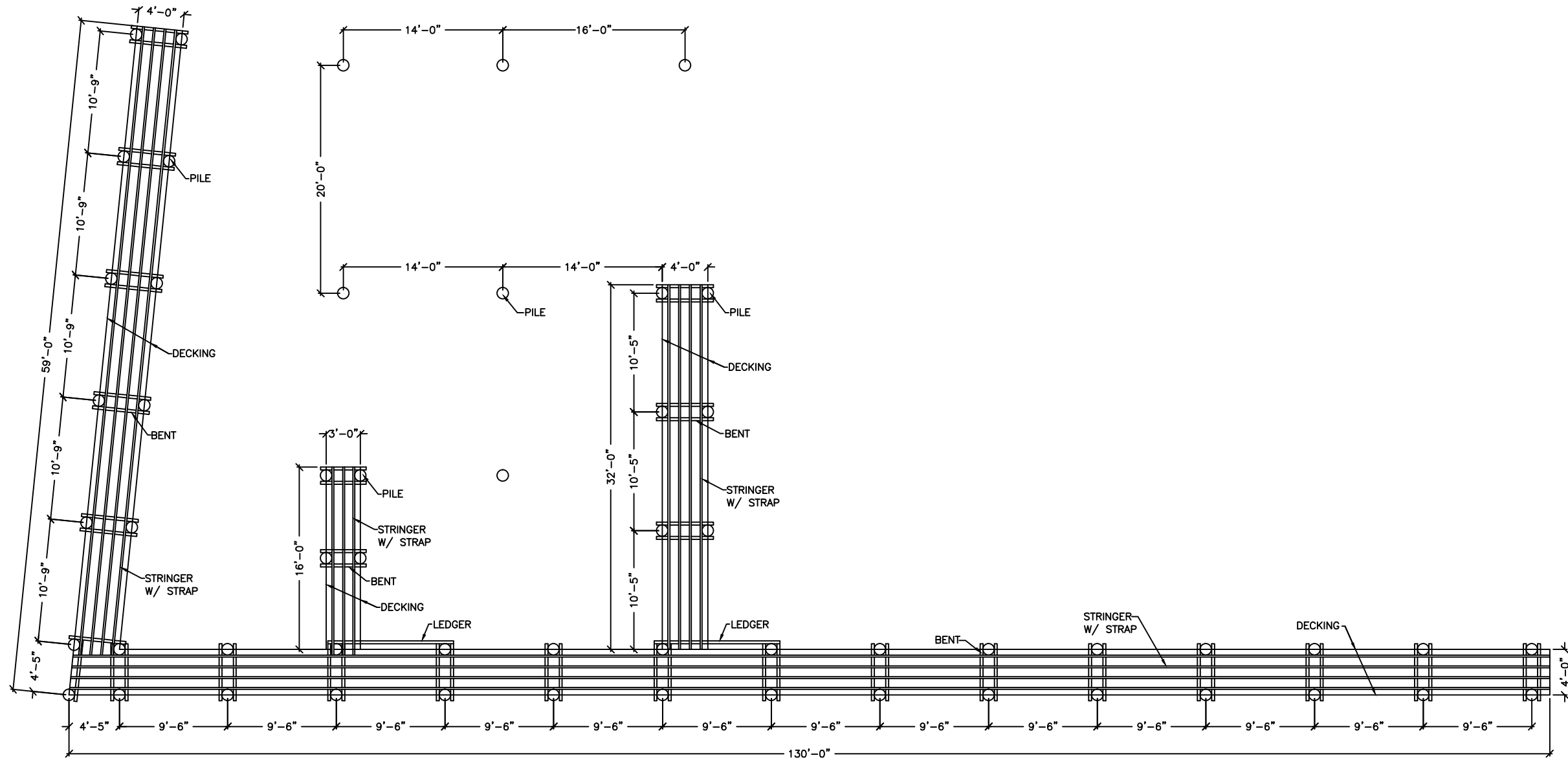




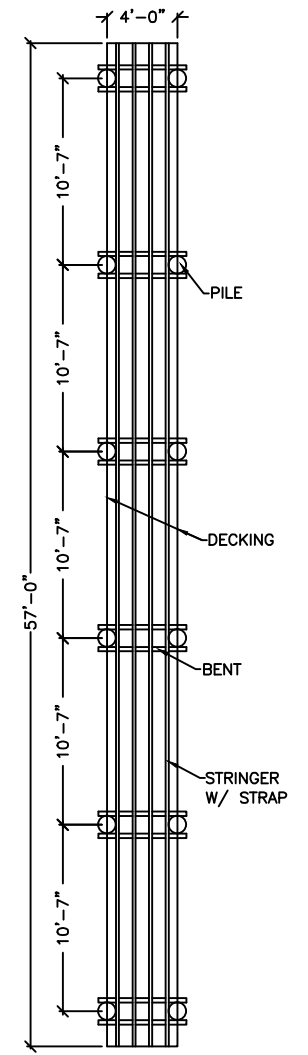
SECTION A-A
SCALE: 1/8" = 1'-0"



SECTION B-B
SCALE: 1/8" = 1'-0"



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



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

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 EDITION). FOLLOW ALL APPLICABLE PROVISIONS FOR ALL PHASES OF CONSTRUCTION.
3. THE PROPOSED STRUCTURE(S) IS DESIGNED FOR A LIVE LOAD OF 100 PSF. WIND LOADS ARE DESIGNED PER THE FLORIDA BUILDING CODE.
4. CONTRACTOR SHALL ADHERE TO THE STANDARD MANATEE CONSTRUCTION CONDITIONS (LATEST EDITION). 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.

PILES:

CONCRETE SEAWALL REPAIR PILES SHALL BE 12"x12" PRESTRESSED CONCRETE PILES W/ FOUR 0.6" DIAMETER 270 LOW-RELAXATION STRAND @ 44 KIPS W/ W3.4 WIRE SPIRAL TIES. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 6000 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.

ALTERNATE STRAND PATTERNS - EIGHT 7/16" DIAMETER 270 LOW-RELAXATION STRAND @ 23.3 KIPS
EIGHT 1/2" DIAMETER 250 STRESS RELIEVED STRAND @ 24.1 KIPS
TWELVE 3/8" DIAMETER 270 LOW-RELAXATION STRAND @ 17.2 KIPS
TWELVE 3/8" DIAMETER 250 STRESS RELIEVED STRAND @ 15.6 KIPS

WOOD DOCK REPAIR 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 AWPA C3 AND C18 FOR MARINE PILES. THE MINIMUM BUTT DIAMETER SHALL BE 12 INCHES, MEASURED AT A SECTION 3 FEET FROM THE END. FOR PILES UP TO 50 FEET IN LENGTH THE MINIMUM TIP DIAMETER SHALL BE 9 INCHES.

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.

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

HEIGHT OF 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.

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.

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

CONCRETE CAP, VERTICAL SLABS & 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):
3" MINIMUM, BOTTOM 3" MINIMUM, SIDES 3" MINIMUM

PROVIDE 90° BEND WITH 36" MINIMUM SPLICE FOR ALL VERTICAL BARS ON TOP OF VERTICAL WALL. PANELS SHALL PENETRATE CONCRETE CAP 3" MINIMUM. BOTTOM OF VERTICAL SLABS SHALL BE PLACED ON FIRM ROCK OR PENETRATE CANAL BOTTOM 4' MIN.

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 AWPA 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: 3x10 OR DOUBLE 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 3/4" STAINLESS STEEL BOLTS, WASHERS, AND NUT 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.

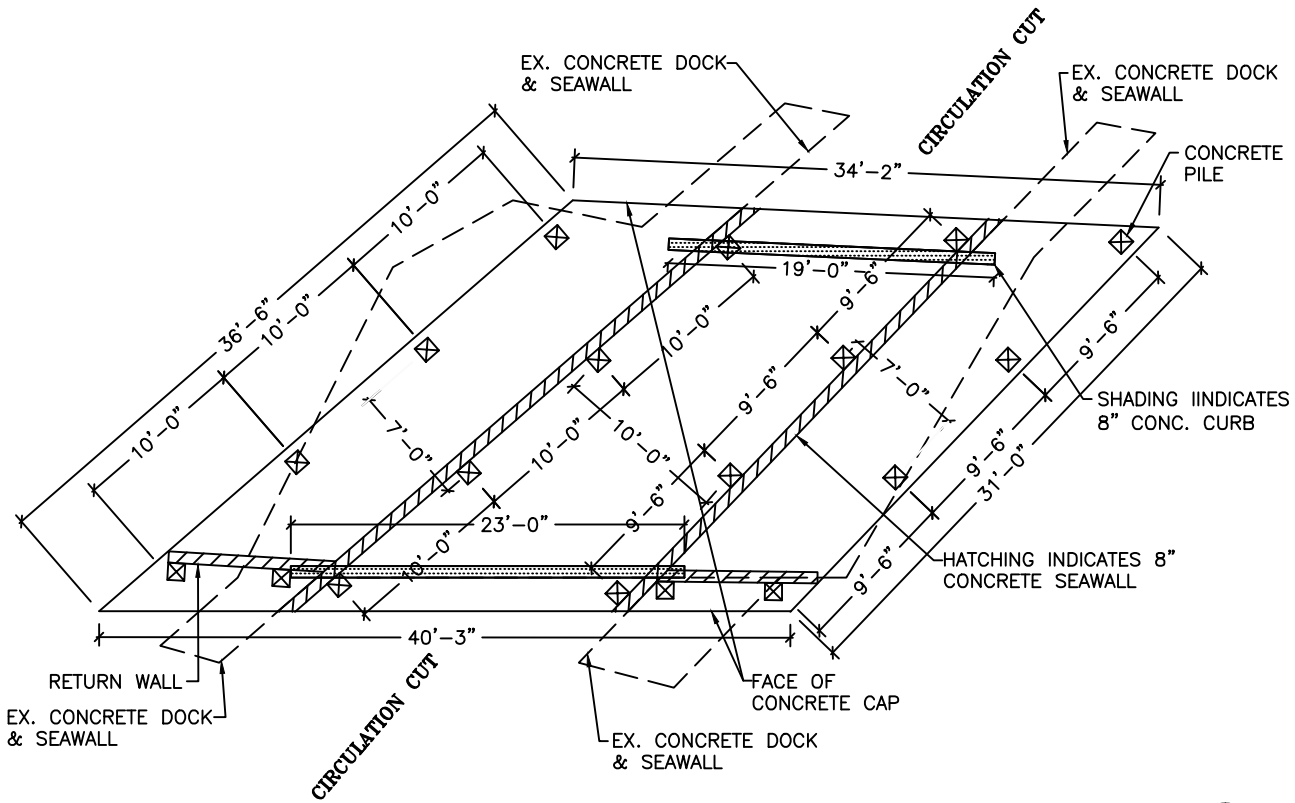
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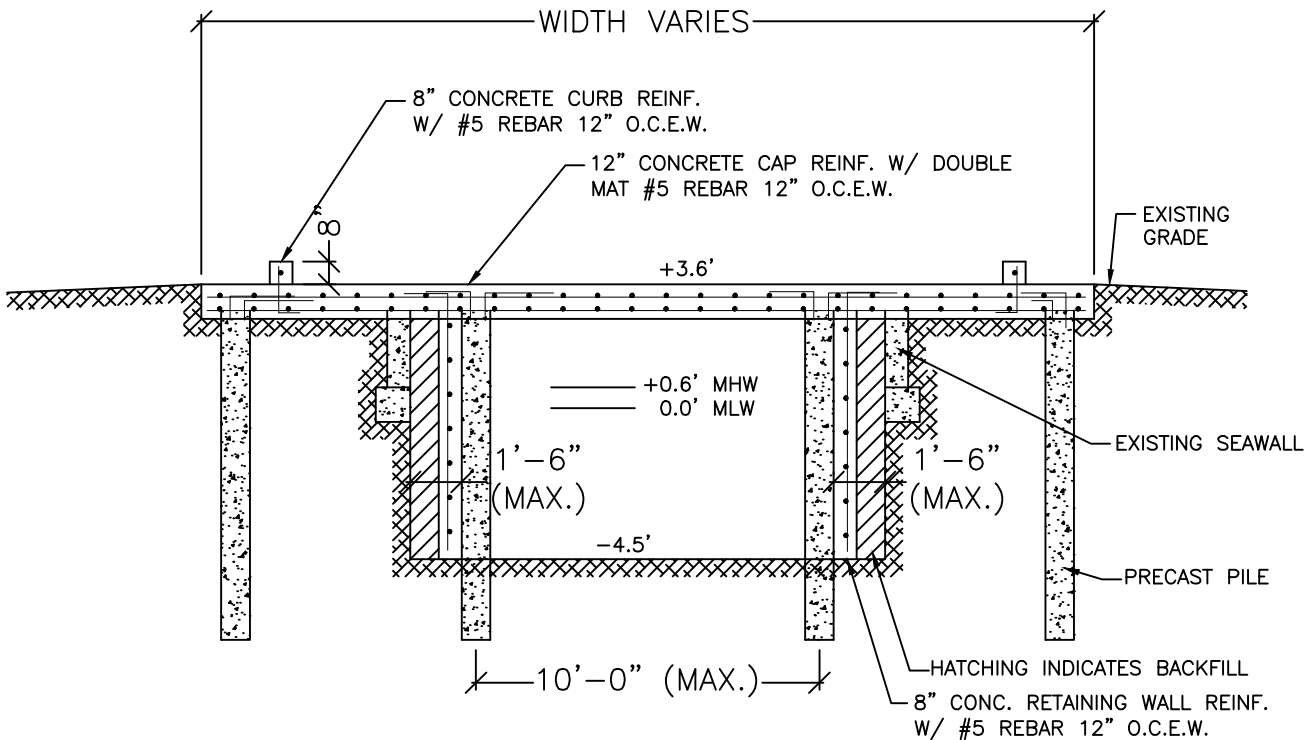
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FOUNDATION PLAN (AREA C)

SCALE: 3/32" = 1'-0"



TYPICAL SECTION (AREA C)

SCALE: 3/16" = 1'-0"

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ADDENDUM A

SHEET 1 OF 1