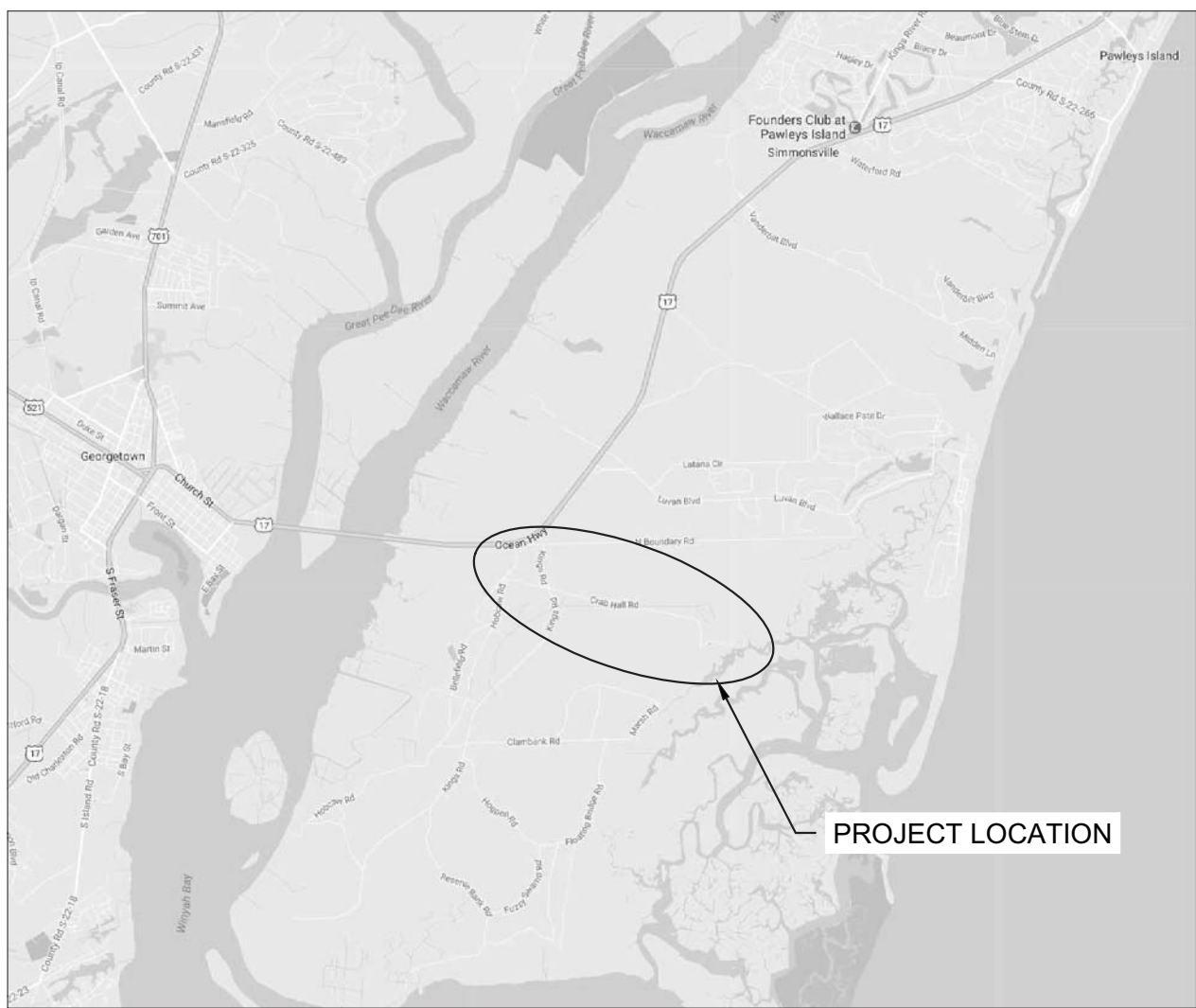


USC BARUCH INSTITUTE HOBCEW-BARONY  
CRAB HAUL ROAD  
GEORGETOWN COUNTY | SOUTH CAROLINA



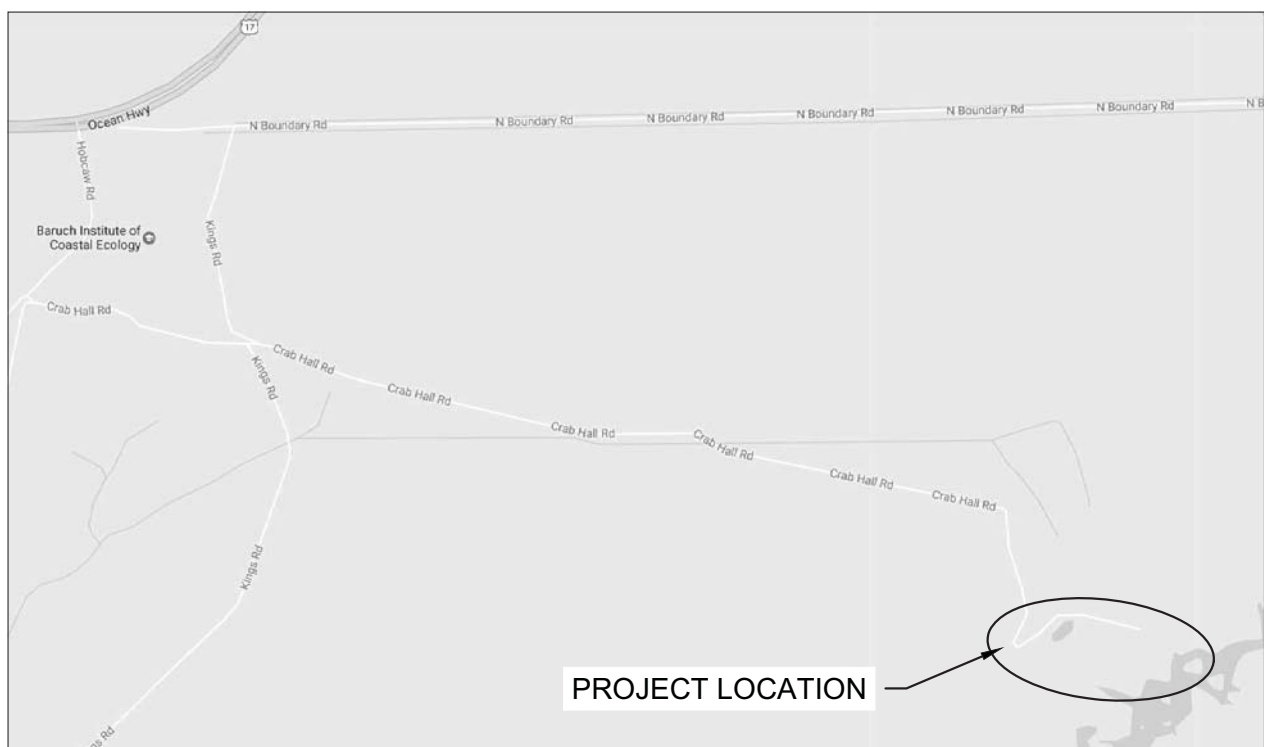
# SITE OVERVIEW

SCALE: N.T.S.

A circular icon containing a stylized house shape with the letter 'N' inside, indicating North.

# LOCATION MAP

SCALE: N.T.S.

A circular icon containing a stylized house shape with the letter 'N' inside, indicating North.

**VICINITY MAP**  
SCALE: N.T.S.

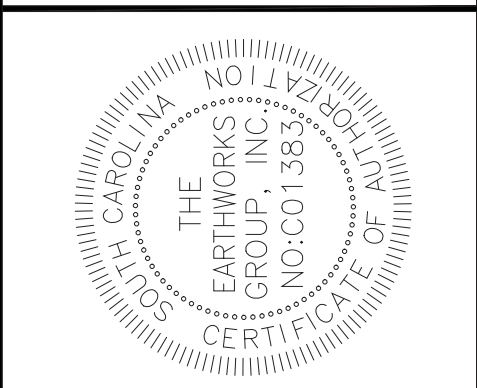
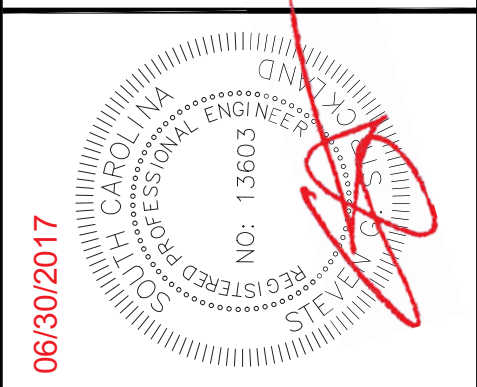
DRAWING INDEX	
SHEET	TITLE
G1.01	COVER PAGE
	<b>OYSTER LANDING PIER (OLP)</b>
S1.01	OYSTER LANDING INDEX & DETAILS
S1.02	OLP: SECTION 01 & SECTION 02
S1.03	OLP: SECTION 03
S1.04	OLP: DETAILS
	<b>SALT MARSH BOARDWALK (SMB)</b>
S2.01	SMB INDEX & DETAILS
S2.02	SMB: SECTION 01 & SECTION 02
S2.03	SMB: SECTION 03
S2.04	SMB: SECTIONS
S3.01	STRUCTURAL NOTES

**EARTHWORKS**



planning and design consultants

11655 HIGHWAY 707  
MURRELLS INLET, SC 29576  
843.651.7903  
(FAX) 843.651.7900  
[www.earthworksgroup.com](http://www.earthworksgroup.com)

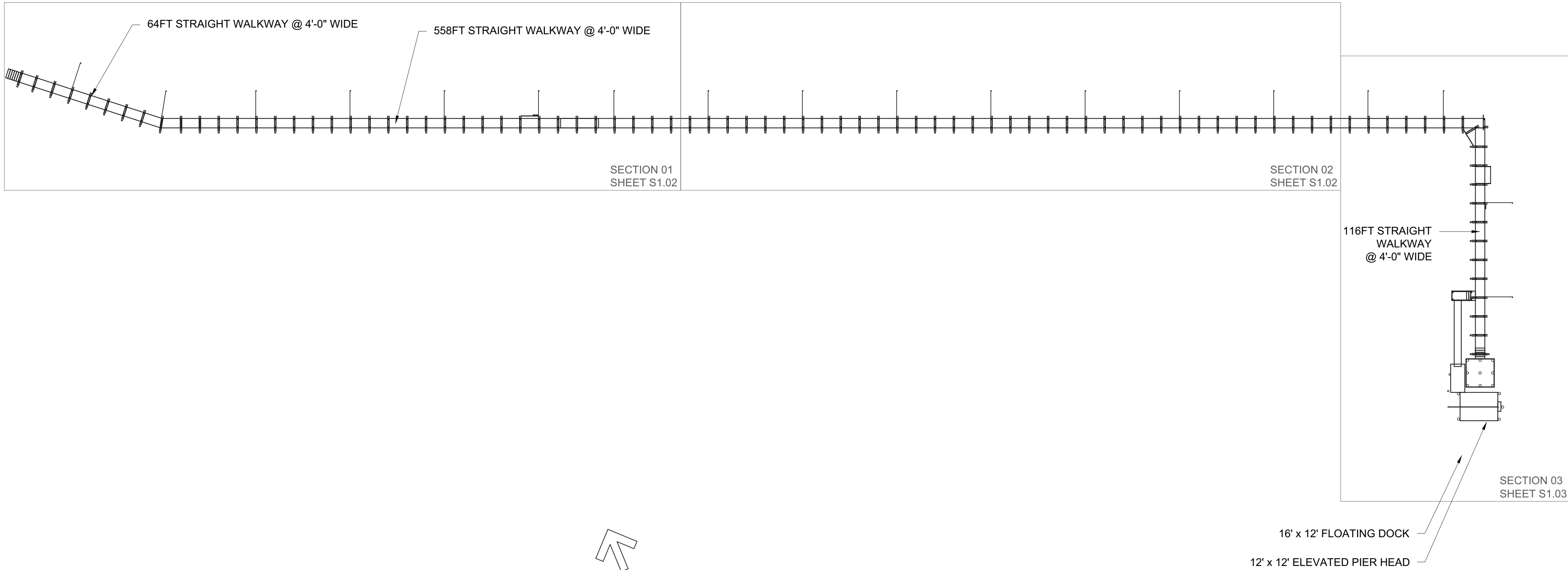


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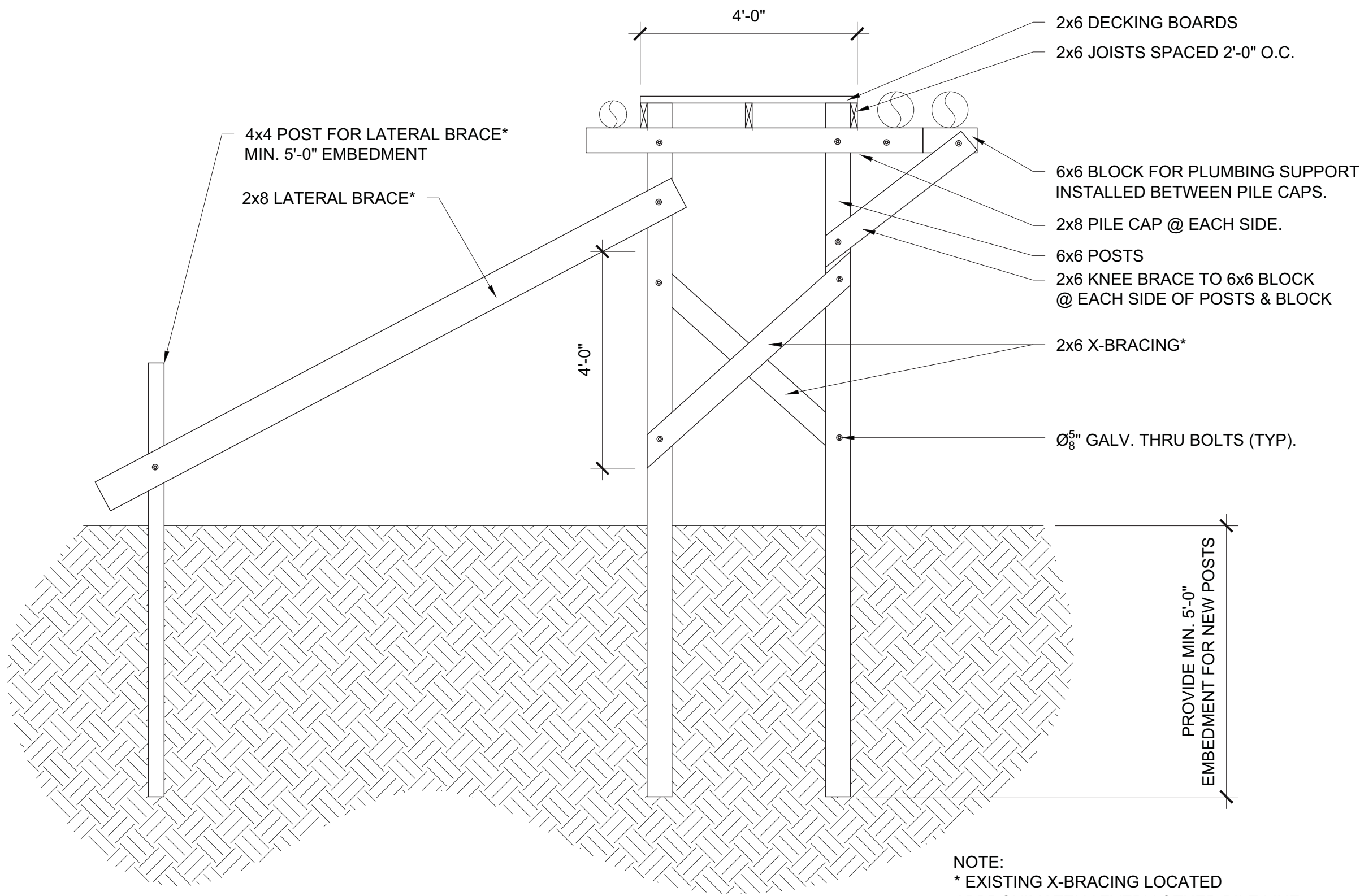
PROJECT: 171052.001		PROJECT: MARINE LAB PIER REPAIRS	
DATE: 6/30/2017		LOCATION: CRAB HAUL ROAD	
SCALE: #####		HOBCAW-BARONY	
DESIGNED BY: SGS		UNIVERSITY OF SOUTH CAROLINA	
DRAWN BY: DHC		743 GREENE ST. COLUMBIA SC 29208	
CHECKED BY: SGS		COVER PAGE	

**CONCLUSIONS** The current research has shown that the use of a structured approach to the development of a CVR can help reduce the risk of bias in the evidence presented at trial. It also provides a means of ensuring that the evidence is presented in a way that is fair and balanced. The findings of this study suggest that the use of a structured approach to the development of a CVR can help reduce the risk of bias in the evidence presented at trial. It also provides a means of ensuring that the evidence is presented in a way that is fair and balanced.





**OYSTER LANDING INDEX**  
SCALE: 1" = 30'



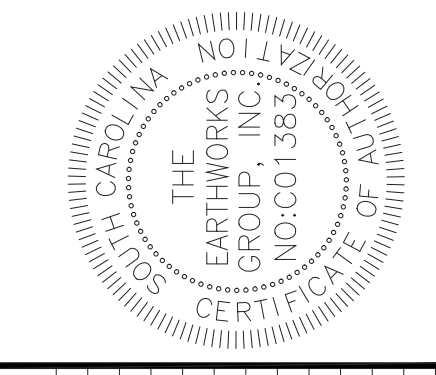
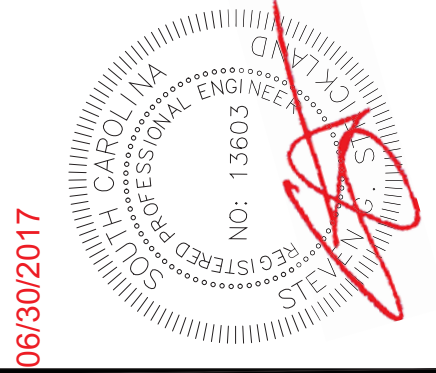
NOTE:  
\* EXISTING X-BRACING LOCATED APPROXIMATELY EVERY OTHER PILE LINE.  
\*\* EXISTING LATERAL BRACING LOCATED APPROXIMATELY EVERY FIVE PILE LINES.

**TYPICAL SECTION @ PILE CAP**  
SCALE: 1/2" = 1'-0"

- GENERAL NOTES:**
- 1.) CONTRACTOR SHALL COORDINATE ACCESS TO THE SITE WITH OWNER'S ON-SITE PROJECT MANAGER.
  - 2.) CONTRACTOR SHALL MAINTAIN A MEANS OF FOOT TRAFFIC ACCESS TO THE OYSTER LANDING PIER HEAD AND EQUIPMENT DURING CONSTRUCTION ACTIVITIES. ALL EFFORTS SHALL BE MADE TO MINIMIZE CONSTRUCTION ACTIVITIES' IMPACT TO SURROUNDING MARSH. FOOT TRAFFIC AND TEMPORARY BRACING SHALL BE LIMITED TO WITHIN FOUR FEET OF THE EXISTING WALKWAYS AND STRUCTURES WHERE APPLICABLE. ACTIVITIES OF FURTHER DISTURBANCE SHALL BE APPROVED BY OWNER'S ON-SITE PROJECT MANAGER PRIOR TO COMMENCEMENT.
  - 3.) GENERAL CONSTRUCTION WASTE AND DEMOLISHED MATERIALS SHALL BE CARRIED AND DISPOSED OF OFFSITE. CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE AND NOT ALLOW ANY CONSTRUCTION DEBRIS, GARBAGE, LIQUIDS, OR OTHER WASTES TO ENTER THE MARSH.
  - 4.) ALL NEW CONNECTORS SHALL BE A MINIMUM OF HOT DIPPED GALVANIZED OR STAINLESS STEEL PER THE FOLLOWING:

FASTENER	CORROSION PROTECTION
THRU/LAG BOLTS	HOT-DIPPED GALVANIZED
SCREW FASTENERS	316 STAINLESS STEEL
CONNECTORS	316 STAINLESS STEEL
  - 5.) ALL NEW TIMBERS AND DIMENSIONAL LUMBER TO BE INSTALLED SHALL BE MIN. NO. 2 SOUTHERN YELLOW PINE AND PRESSURE-TREATED WITH AN APPROPRIATE PRESERVATIVE TO SATISFY THE FOLLOWING APWA USE CATEGORIES:

MEMBER	USE CATEGORY
PILES	UC5B
X-BRACING/PILE CAPS	UC5B
JOISTS/STRINGERS	UC4B
DECKING	UC3B
  - 6.) ALL COMPOSITE MATERIALS REPLACED WITH NEW ON SALT MARSH BOARDWALK SHALL BE TREX MATERIALS, UNLESS APPROVED OTHERWISE BY OWNER.



REVISION SCHEDULE		
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PROJECT: MARINE LAB PIER REPAIRS		LOCATION: CRAB HAUL ROAD HOBCEW-BARONY	
DATE: 6/30/2017		UNIVERSITY OF SOUTH CAROLINA 743 GREENE ST. COLUMBIA, SC 29208	
SCALE: #####		PREPARED FOR: UNIVERSITY OF SOUTH CAROLINA 743 GREENE ST. COLUMBIA, SC 29208	
DESIGNED BY: SGS		OYSTER LANDING PIER INDEX	
DRAWN BY: DHC			
CHECKED BY: SGS			

SHEET

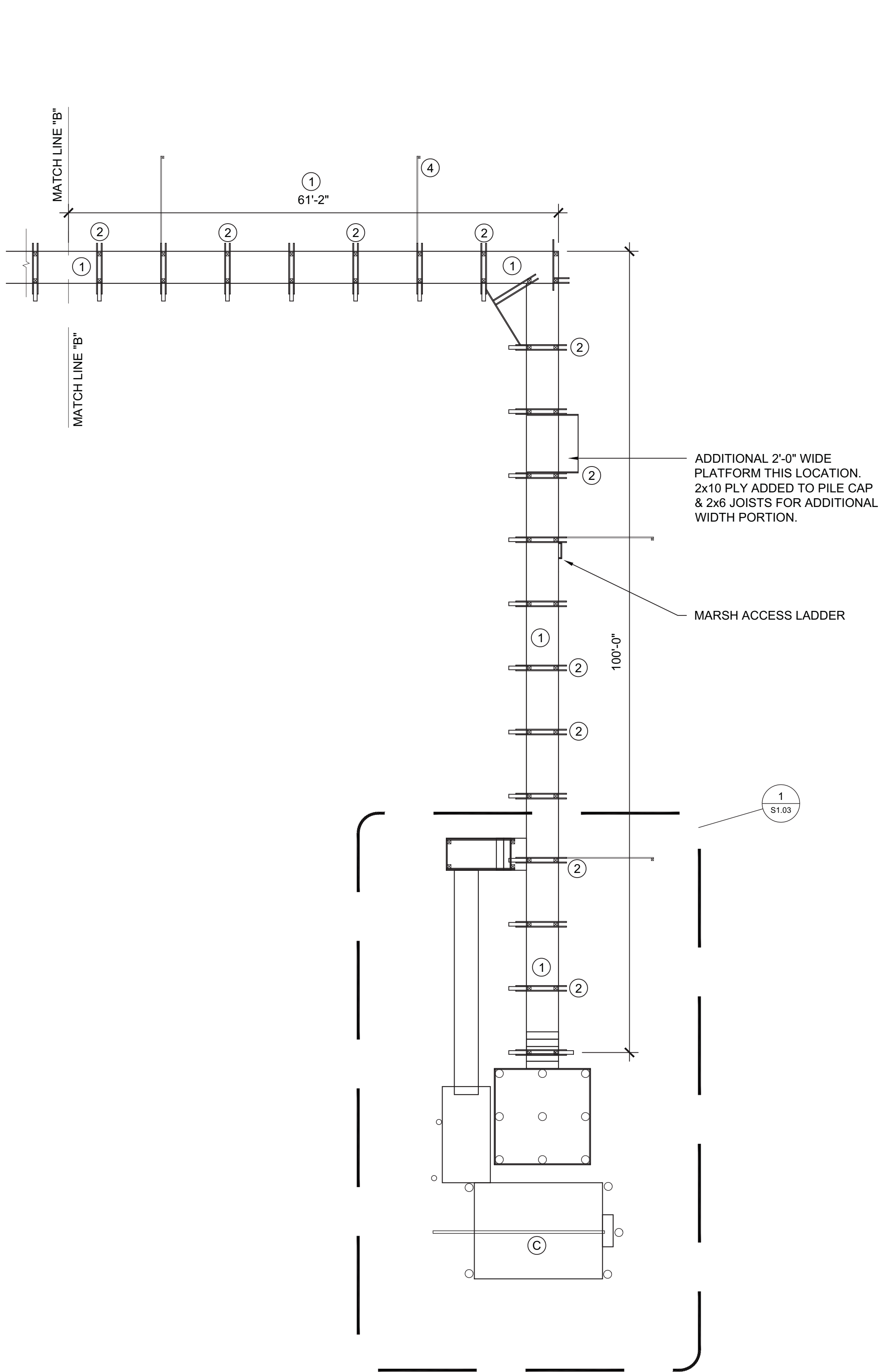
S1.01

OF 10



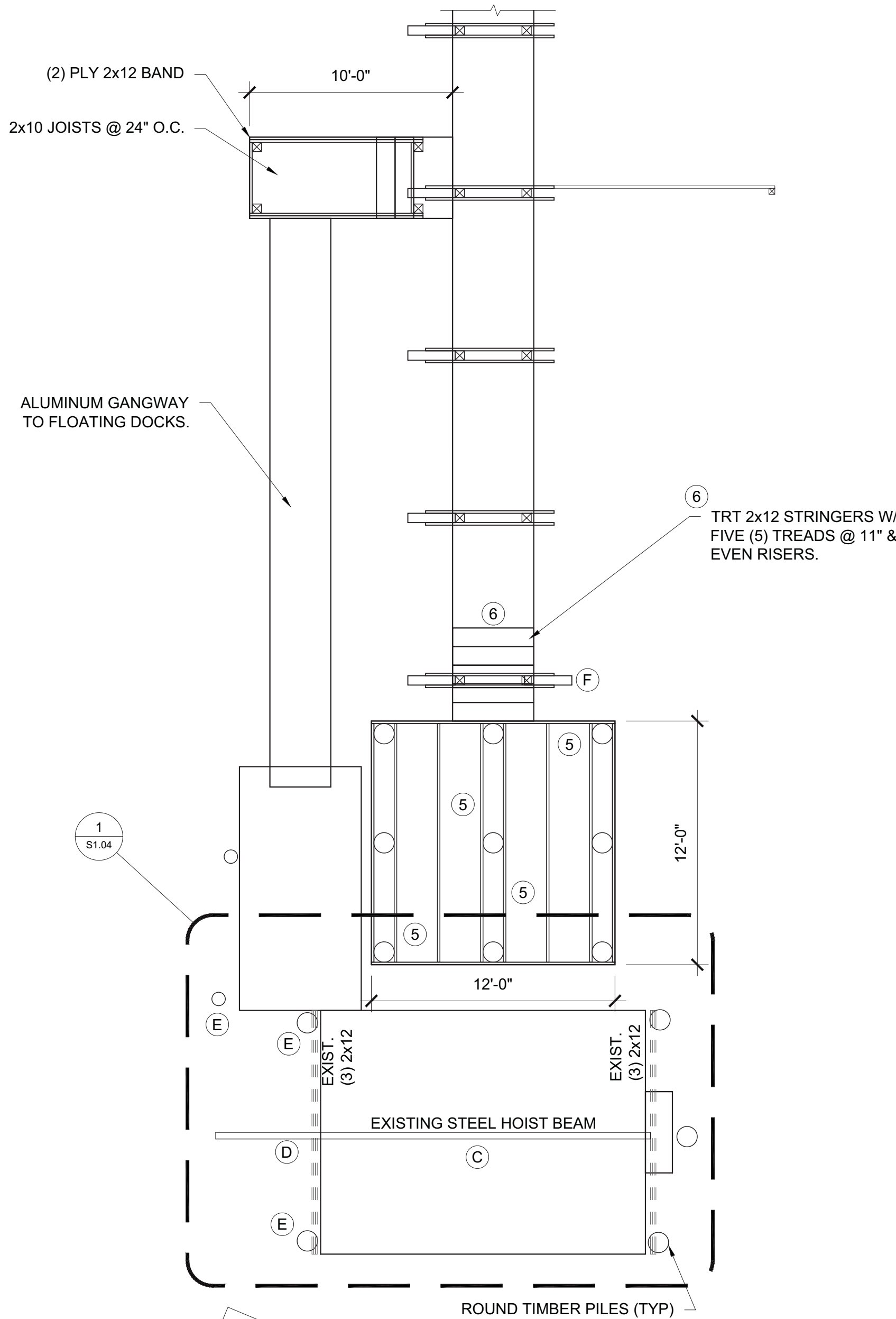






### OYSTER LANDING | SECTION 03

SCALE: 1" = 10'



### OYSTER LANDING | PIER HEAD

SCALE: 1" = 5'

#### OLP: REPAIR LEGEND

- A** PROVIDE TWO (2) NEW STA-RITE CSPHK3-142 CAST IRON PUMPS WITH 7.5 HP, 3-PH, 230-460 V MOTOR. INSTALL ONE (1) PUMP ASSEMBLY ON FLOATING DOCK AND TURN OVER ONE (1) PUMP ASSEMBLY TO OWNER.
- B** PROVIDE NEW Ø4" SCH 40 PVC PIPING ON OUTPUT SIDE OF NEW PUMP PER DETAIL 1 | SHEET S1.04.
- C** REMOVE AND DISPOSE OF EXISTING STEEL HOIST BEAM.
- D** REMOVE AND DISPOSE OF EXISTING (3) PLY 2x12 BEAM AND REPLACE W/ NEW (2) PLY 2x10 BEAM W/ TWO (2) 5/8" GALV. THRU BOLTS @ EACH NEW PILE AFTER PILE INSTALLATIONS. INSTRUMENTATION ON TOP OF EXISTING BEAM SHALL BE REMOVED AND RETURNED TO OWNER'S POSSESSION.
- E** TIMBER PILE SCOPE OF WORK @ FLOATING DOCK:
- 1.) DEMO AND DISPOSE OF EXISTING TIMBER PILES IDENTIFIED.
  - 2.) PROVIDE NEW MIN. 40FT x Ø10" BUTT PILES W/ MIN. Ø8" TIP AT LOCATION OF REMOVED PILES. DRIVE PILES UNTIL REFUSAL AND MAINTAIN MINIMUM 10 FT. HEIGHT ABOVE MEAN HIGH WATER MARK (MIN. 12.00' NGVD29 @ TOP OF PILE).
  - 3.) AT ONE (1) LOCATION, REMOVE AND REINSTALL U-BOLT AS NEW PILE SLIP BRACKET.
  - 4.) AT TWO (2) LOCATIONS, PROVIDE NEW Ø5" U-BOLT AS NEW PILE SLIP BRACKET.

- F** DEMO AND REMOVE EXISTING 6x6 PILE LINE AND REPLACE WITH NEW TRT 6x6 PILE LINE W/ PILE CAP AND X-BRACING PER TYPICAL PILE CAP DETAIL ON SHEET S1.01. NO LATERAL BRACE W/ 4x4 REQUIRED.
- G** REPLACE EXISTING 4x4 GUARD POSTS ON FLOATING DOCK WHERE INDICATED. FASTEN NEW POSTS TO BAND WITH (2) Ø5" GALV. THRU BOLTS. MATCH EXISTING GUARD POST HEIGHTS.
- H** REPLACE EXISTING GUARD RAIL ASSEMBLY ON FLOATING DOCK WHERE INDICATED. PROVIDE NEW 2x4 MID RAIL @ MID-HEIGHT OF POSTS, NEW 2x4 TOP RAIL, AND NEW 2x6 CAP. FASTEN ALL RAILS TO 4x4 POSTS W/ MIN. (3) #10 x 3" S.S. SCREWS.
- I** REPLACE DAMAGED 2x10 BAND ON FLOATING DOCK. PROVIDE NEW 8" ANGLE BRACKET WITH NEW BAND. FASTEN 2x10s AND ANGLE W/ (3) Ø5" GALV. THRU BOLTS ON EACH LEG OF NEW ANGLE.

#### GENERAL NOTES:

- 1.) CONTRACTOR SHALL COORDINATE ACCESS TO THE SITE WITH OWNER'S ON-SITE PROJECT MANAGER.
- 2.) CONTRACTOR SHALL MAINTAIN A MEANS OF FOOT TRAFFIC ACCESS TO THE OYSTER LANDING PIER HEAD AND EQUIPMENT DURING CONSTRUCTION ACTIVITIES.
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- 5.) ALL NEW CONNECTORS SHALL BE A MINIMUM OF HOT DIPPED GALVANIZED OR STAINLESS STEEL PER THE FOLLOWING:

FASTENER	CORROSION PROTECTION
THRU/LAG BOLTS	HOT-DIPPED GALVANIZED
SCREW FASTENERS	316 STAINLESS STEEL
CONNECTORS	316 STAINLESS STEEL
- 6.) ALL NEW TIMBERS AND DIMENSIONAL LUMBER TO BE INSTALLED SHALL BE MIN. NO. 2 SOUTHERN YELLOW PINE AND PRESSURE-TREATED WITH AN APPROPRIATE PRESERVATIVE TO SATISFY THE FOLLOWING APWA USE CATEGORIES:

MEMBER	USE CATEGORY
PILES	UC5B
X-BRACING/PILE CAPS	UC5B
JOISTS/STRINGERS	UC4B
DECKING	UC3B
- 7.) ALL COMPOSITE MATERIALS REPLACED WITH NEW ON SALT MARSH BOARDWALK SHALL BE TREX MATERIALS, UNLESS APPROVED OTHERWISE BY OWNER.

#### OLP: FORTIFICATION LEGEND

1. REPLACE ENTIRETY OF 4'-0" WIDE DECKING WITH NEW TREATED 2x6 LUMBER. FASTEN NEW DECKING TO EACH JOIST W/ MIN. (3) #10 x 3" SS SCREWS. PROVIDE 5/8" SPACING BETWEEN BOARDS.
2. PROVIDE NEW 2x6 X-BRACING PER TYPICAL PILE LINE SECTION | SHEET S1.01
3. PROVIDE NEW TREATED 2x8 LATERAL BRACE ONLY PER TYPICAL PILE LINE SECTION | SHEET S1.01
4. PROVIDE NEW 4x4 POST & LATERAL BRACE @ PILE LINE PER DETAIL TYPICAL PILE LINE SECTION | SHEET S1.01
5. FASTEN EXISTING 2x10 DECKING TO EXISTING JOISTS WITH MIN. (3) #10 x 3" SS SCREWS AND INSTALL NEW TREATED 2x8 DECKING OVER EXISTING 2x10s W/ MIN. (3) #10 x 3" SS SCREWS SPACED 24" O.C. CONTRACTOR SHALL REMOVE EXISTING EQUIPMENT TO ACCESS PIER HEAD DECKING AND RE-INSTALL EXISTING EQUIPMENT UPON DECKING COMPLETION.
6. REPLACE STAIRS @ PIER HEAD WITH NEW 2x12 STRINGERS SPACED 16" O.C. PER STAIR DETAIL ON SHEET S1.01.

REVISION SCHEDULE	
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1	DATE: 6/30/2017
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11	DATE: 6/30/2017
12	DATE: 6/30/2017

PROJECT: MARINE LAB PIER REPAIRS	
LOCATION:	CRAB HAUL ROAD HOBCEW-BARONY
PREPARED FOR:	UNIVERSITY OF SOUTH CAROLINA 743 GREENE ST. COLUMBIA, SC 29208
OLP: REPAIRS	

PROJECT: 171052.001	DATE: 6/30/2017	SCALE: #####	DESIGNED BY: SGS	DRAWN BY: DHC	CHECKED BY: SGS
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- (F) DEMO AND REMOVE EXISTING 6x6 PILE LINE AND REPLACE WITH NEW TRT 6x6 PILE LINE W/ PILE CAP AND X-BRACING PER TYPICAL PILE CAP DETAIL ON SHEET S1.01. NO LATERAL BRACE W/ 4x4 REQUIRED.
- (G) REPLACE EXISTING 4x4 GUARD POSTS ON FLOATING DOCK WHERE INDICATED. FASTEN NEW POSTS TO BAND WITH (2) Ø $\frac{3}{8}$ " GALV. THRU BOLTS. MATCH EXISTING GUARD POST HEIGHTS.
- (H) REPLACE EXISTING GUARD RAIL ASSEMBLY ON FLOATING DOCK WHERE INDICATED. PROVIDE NEW 2x4 MID RAIL @ MID-HEIGHT OF POSTS, NEW 2x4 TOP RAIL AND NEW 2x6 CAP. FASTEN ALL RAILS TO 4x4 POSTS W/ MIN. (3) #10 x 3" S.S. SCREWS.
- (I) REPLACE DAMAGED 2x10 BAND ON FLOATING DOCK. PROVIDE NEW 8" ANGLE BRACKET WITH NEW BAND. FASTEN 2x10s AND ANGLE W/ (3) Ø $\frac{3}{8}$ " GALV. THRU BOLTS ON EACH LEG OF NEW ANGLE.

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- 2.) CONTRACTOR SHALL MAINTAIN A MEANS OF FOOT TRAFFIC ACCESS TO THE OYSTER LANDING PIER HEAD AND EQUIPMENT DURING CONSTRUCTION ACTIVITIES.
- 3.) ALL EFFORTS SHALL BE MADE TO MINIMIZE CONSTRUCTION ACTIVITIES' IMPACT TO SURROUNDING MARSH. FOOT TRAFFIC AND TEMPORARY BRACING SHALL BE LIMITED TO WITHIN FOUR FEET OF THE EXISTING WALKWAYS AND STRUCTURES WHERE APPLICABLE. ACTIVITIES OF FURTHER DISTURBANCE SHALL BE APPROVED BY OWNER'S ON-SITE PROJECT MANAGER PRIOR TO COMMENCEMENT.
- 4.) GENERAL CONSTRUCTION WASTE AND DEMOLISHED MATERIALS SHALL BE CARRIED AND DISPOSED OF OFFSITE. CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE AND NOT ALLOW ANY CONSTRUCTION DEBRIS, GARBAGE, LIQUIDS, OR OTHER WASTES TO ENTER THE MARSH.
- 5.) ALL NEW CONNECTORS SHALL BE A MINIMUM OF HOT DIPPED GALVANIZED OR STAINLESS STEEL PER THE FOLLOWING:

<u>FASTENER</u>	<u>CORROSION PROTECTION</u>
THRU/LAG BOLTS	HOT DIPPED GALVANIZED
SCREW FASTENERS	316 STAINLESS STEEL
CONNECTORS	316 STAINLESS STEEL
- 6.) ALL NEW TIMBERS AND DIMENSIONAL LUMBER TO BE INSTALLED SHALL BE MIN. NO. 2 SOUTHERN YELLOW PINE AND PRESSURE-TREATED WITH AN APPROPRIATE PRESERVATIVE TO SATISFY THE FOLLOWING APWA USE CATEGORIES:

<u>MEMBER</u>	<u>USE CATEGORY</u>
PILES	UC5B
X-BRACING/PILE CAPS	UC5B
JOISTS/STRINGERS	UC4B
DECKING	UC3B
- 7.) ALL COMPOSITE MATERIALS REPLACED WITH NEW ON SALT MARSH BOARDWALK SHALL BE TREX MATERIALS, UNLESS APPROVED OTHERWISE BY OWNER.

- ① REPLACE ENTIRETY OF 4'-0" WIDE DECKING WITH NEW TREATED 2x8 LUMBER. FASTEN NEW DECKING TO EACH JOIST W/ MIN. (3) #10 x 3" SS SCREWS. PROVIDE  $\frac{1}{8}$ " SPACING BETWEEN BOARDS.
- ② PROVIDE NEW 2x6 X-BRACING PER TYPICAL PILE LINE SECTION | SHEET S1.01.
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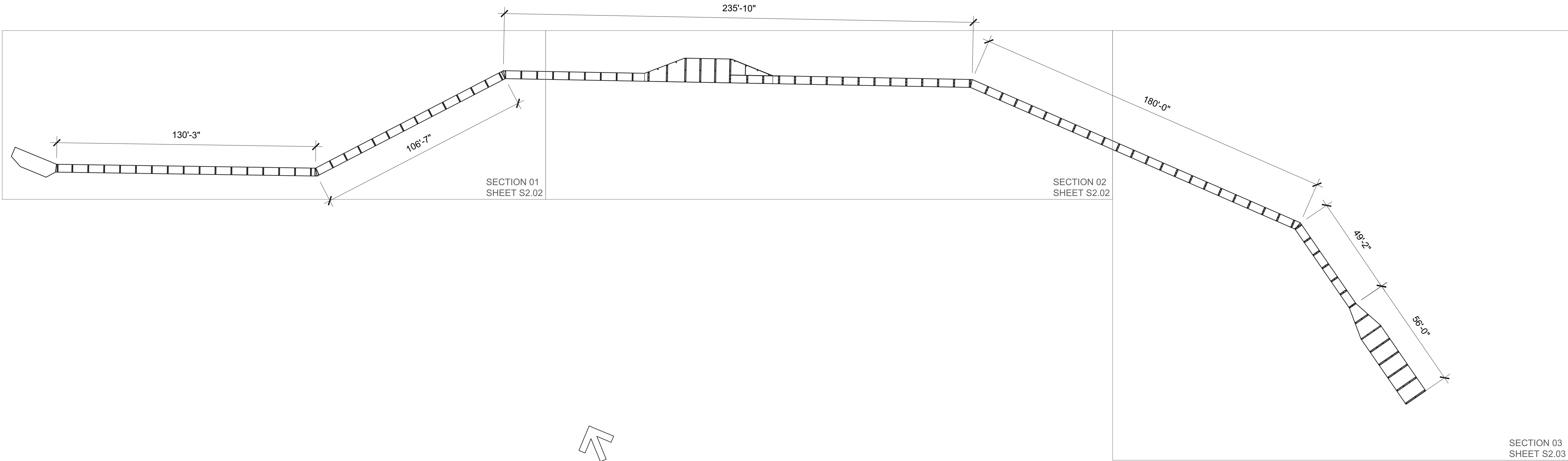
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## OLP: DETAILS

## S1.04

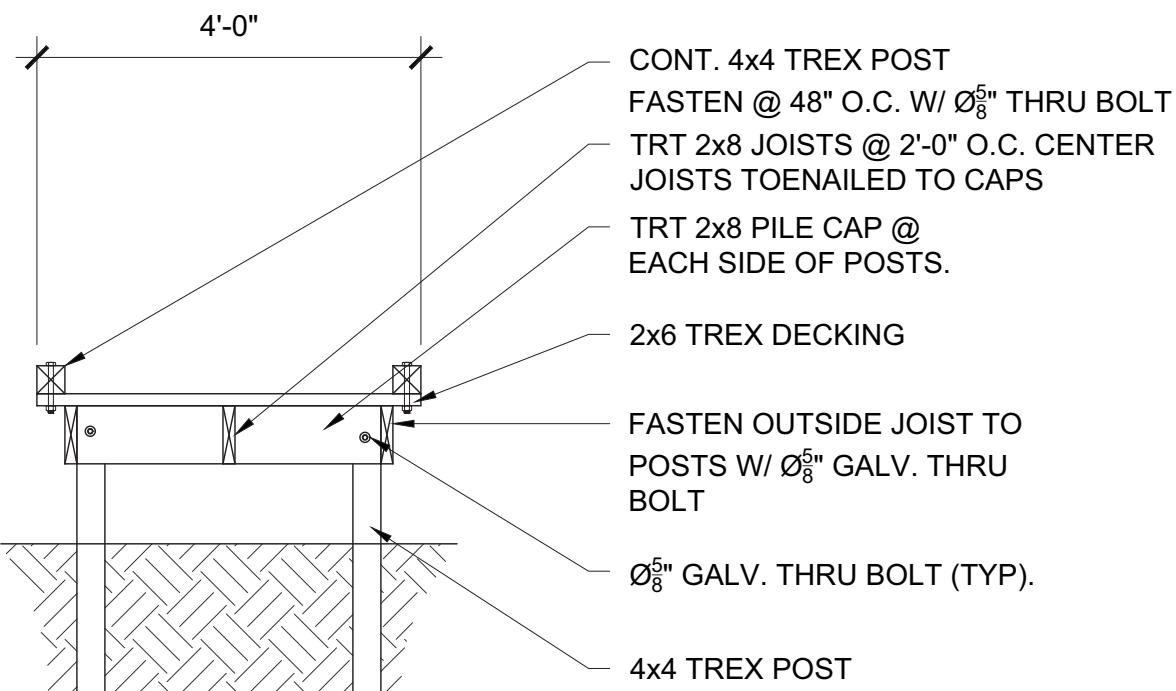
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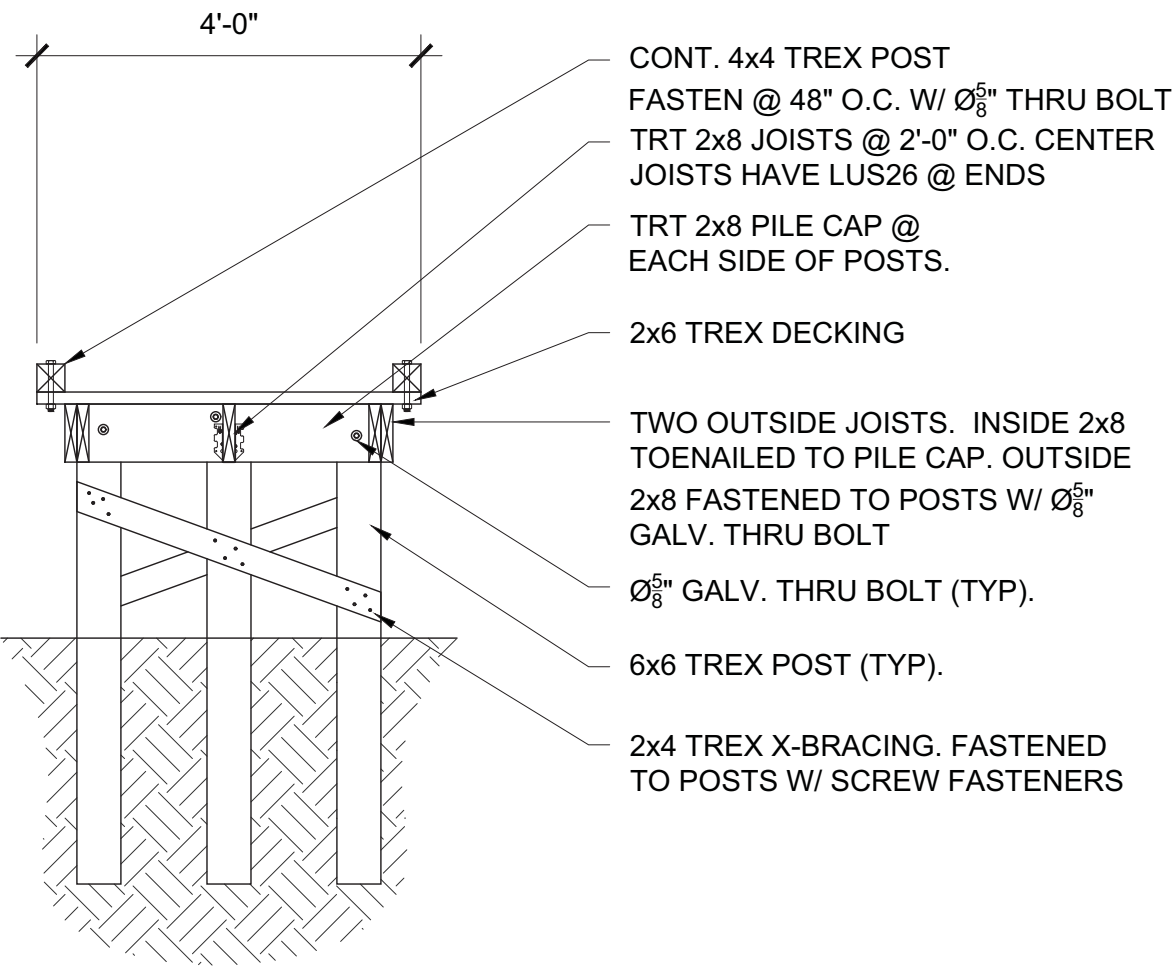
### SALT MARSH BOARDWALK REPAIRS

SCALE: 1" = 30'



#### TYP. EXISTING 4x4 PILE LINE

SCALE: 1/2" = 1'-0"



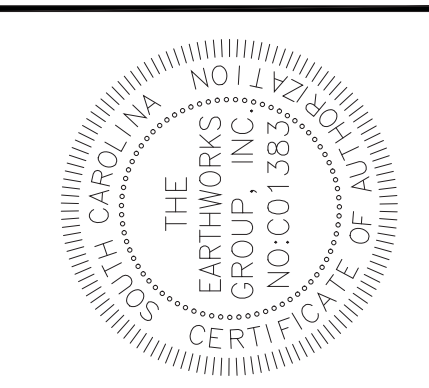
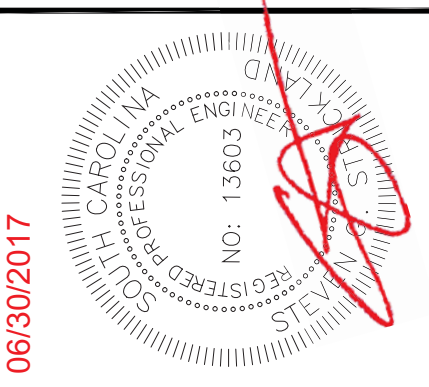
#### TYP. EXISTING 6x6 PILE LINE

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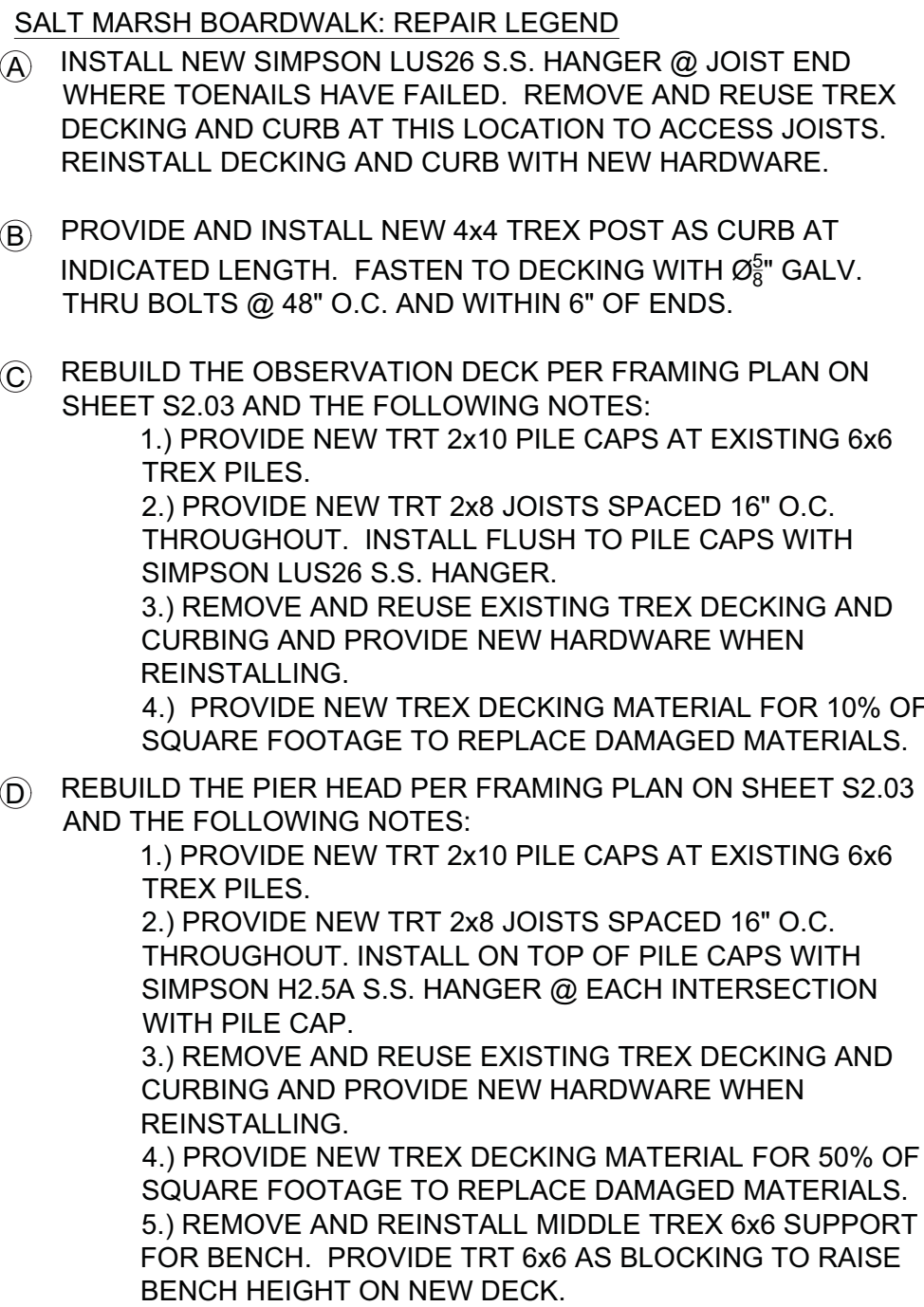
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MARINE LAB PIER REPAIRS		
PROJECT:	CRAB HAUL ROAD	
LOCATION:	HOBCEW-BARONY	
PREPARED FOR:	UNIVERSITY OF SOUTH CAROLINA	
	743 GREENE ST.	
	COLUMBIA, SC 29208	
SALT MARSH BOARDWALK INDEX		

PROJECT: 171052.001	
DATE: 6/30/2017	
SCALE: #####	
DESIGNED BY: SGS	
DRAWN BY: DHC	
CHECKED BY: SGS	



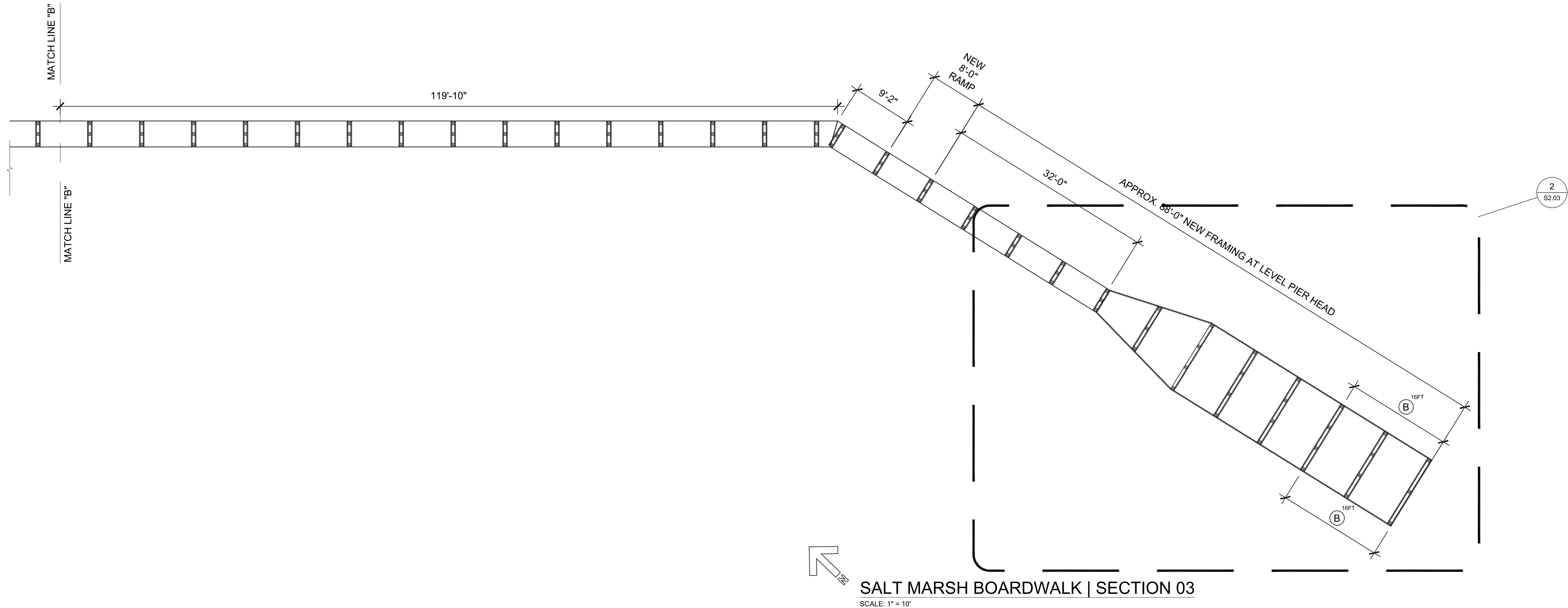
SCALE: 1" = 10'

SCALE: 1" = 10'

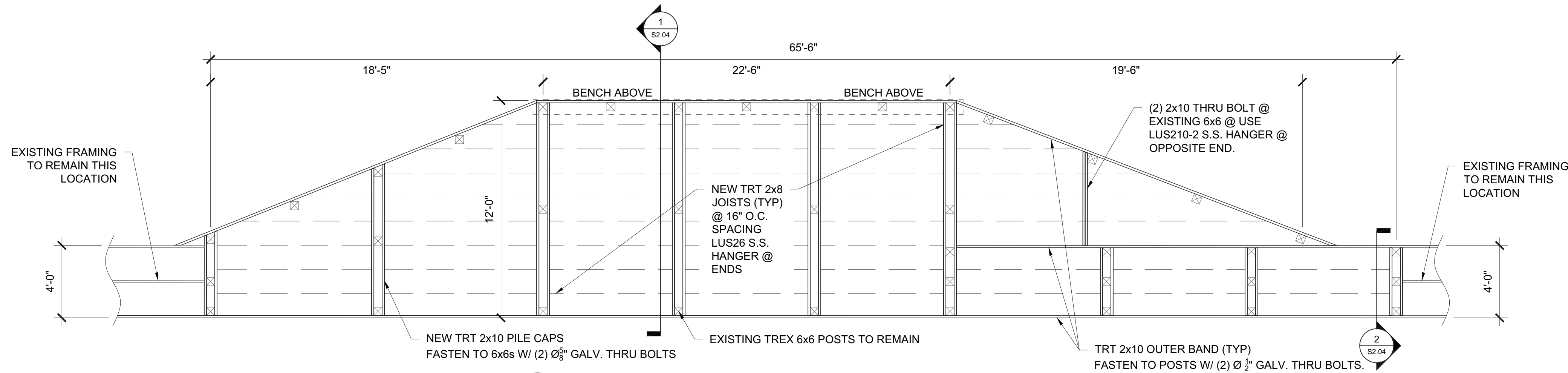
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- 3.) ALL EFFORTS SHALL BE MADE TO MINIMIZE CONSTRUCTION ACTIVITIES' IMPACT TO SURROUNDING MARSH. FOOT TRAFFIC AND TEMPORARY BRACING SHALL BE LIMITED TO WITHIN FOUR FEET OF THE EXISTING WALKWAYS AND STRUCTURES WHERE APPLICABLE. ACTIVITIES OF FURTHER DISTURBANCE SHALL BE APPROVED BY OWNER'S ON-SITE PROJECT MANAGER PRIOR TO COMMENCEMENT.
- 4.) GENERAL CONSTRUCTION WASTE AND DEMOLISHED MATERIALS SHALL BE CARRIED AND DISPOSED OF OFFSITE. CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE AND NOT ALLOW ANY CONSTRUCTION DEBRIS, GARBAGE, LIQUIDS, OR OTHER WASTES TO ENTER THE MARSH.
- 5.) ALL NEW CONNECTORS SHALL BE A MINIMUM OF HOT DIPPED GALVANIZED OR STAINLESS STEEL PER THE FOLLOWING:
- |                 |                       |
|-----------------|-----------------------|
| FASTENER        | CORROSION PROTECTION  |
| THRU/LAG BOLTS  | HOT-DIPPED GALVANIZED |
| SCREW FASTENERS | 316 STAINLESS STEEL   |
| CONNECTORS      | 316 STAINLESS STEEL   |
- 6.) ALL NEW TIMBERS AND DIMENSIONAL LUMBER TO BE INSTALLED SHALL BE MIN. NO. 2 SOUTHERN YELLOW PINE AND PRESSURE-TREATED WITH AN APPROPRIATE PRESERVATIVE TO SATISFY THE FOLLOWING APWA USE CATEGORIES:
- |                     |              |
|---------------------|--------------|
| MEMBER              | USE CATEGORY |
| PILES               | UC5B         |
| X-BRACING/PILE CAPS | UC5B         |
| JOISTS/STRINGERS    | UC4B         |
| DECKING             | UC3B         |
- 7.) ALL COMPOSITE MATERIALS REPLACED WITH NEW ON SALT MARSH BOARDWALK SHALL BE TREX MATERIALS, UNLESS APPROVED OTHERWISE BY OWNER.

PROJECT: 171052.001	PROJECT: MARINE LAB PIER REPAIRS
DATE: 6/30/2017	LOCATION: CRAB HAUL ROAD HOBCAW-BARONY
SCALE: #####	PREPARED FOR: UNIVERSITY OF SOUTH CAROLINA 743 GREENE ST. COLUMBIA, SC 29208
DESIGNED BY: SGS	SMB: REPAIRS
DRAWN BY: DHC	
CHECKED BY: SGS	

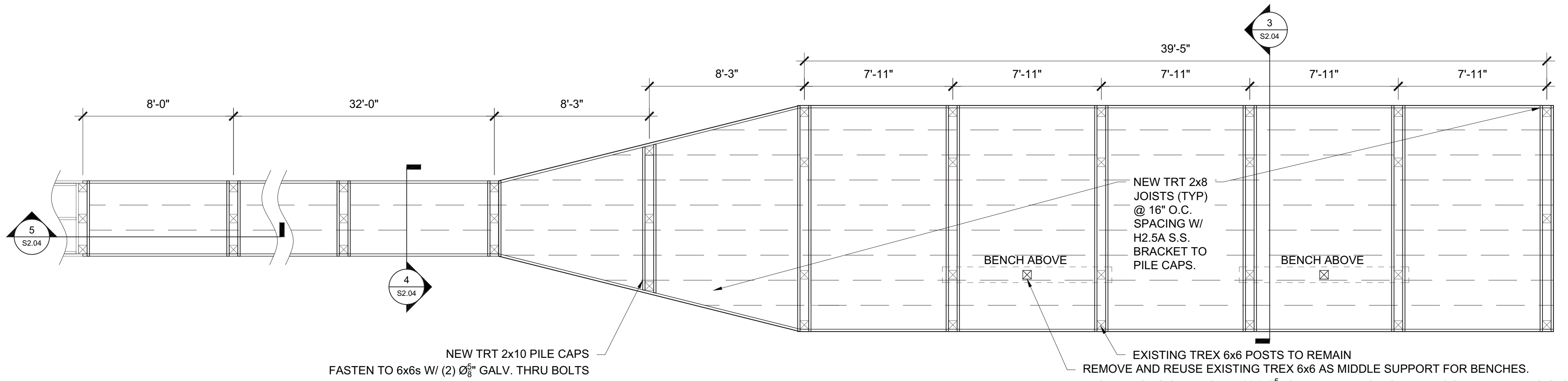




SALT MARSH BOARDWALK | SECTION 03  
SCALE: 1" = 10'



1 SALT MARSH BOARDWALK | OBSERVATION DECK  
SCALE: 1/4" = 1'-0"



2 SALT MARSH BOARDWALK | PIER HEAD  
SCALE: 1/4" = 1'-0"

SALT MARSH BOARDWALK: REPAIR LEGEND

- A) INSTALL NEW SIMPSON LUS26 S.S. HANGER @ JOIST END WHERE TOENAILS HAVE FAILED. REMOVE AND REUSE TREX DECKING AND CURB AT THIS LOCATION TO ACCESS JOISTS. REINSTALL DECKING AND CURB WITH NEW HARDWARE.
- B) PROVIDE AND INSTALL NEW 4x4 TREX POST AS CURB AT INDICATED LENGTH. FASTEN TO DECKING WITH Ø½" GALV. THRU BOLTS @ 48" O.C. AND WITHIN 6" OF ENDS.
- C) REBUILD THE OBSERVATION DECK PER FRAMING PLAN ON SHEET S2.03 AND THE FOLLOWING NOTES:  
1.) PROVIDE NEW TRT 2x10 PILE CAPS AT EXISTING 6x6 TREX PILES.  
2.) PROVIDE NEW TRT 2x8 JOISTS SPACED 16" O.C. THROUGHOUT. INSTALL FLUSH TO PILE CAPS WITH SIMPSON LUS26 S.S. HANGER.  
3.) REMOVE AND REUSE EXISTING TREX DECKING AND CURBING AND PROVIDE NEW HARDWARE WHEN REINSTALLING.  
4.) PROVIDE NEW TREX DECKING MATERIAL FOR 10% OF SQUARE FOOTAGE TO REPLACE DAMAGED MATERIALS.
- D) REBUILD THE PIER HEAD PER FRAMING PLAN ON SHEET S2.03 AND THE FOLLOWING NOTES:  
1.) PROVIDE NEW TRT 2x10 PILE CAPS AT EXISTING 6x6 TREX PILES.  
2.) PROVIDE NEW TRT 2x8 JOISTS SPACED 16" O.C. THROUGHOUT. INSTALL ON TOP OF PILE CAPS WITH SIMPSON H2.5A S.S. HANGER @ EACH INTERSECTION WITH PILE CAP.  
3.) REMOVE AND REUSE EXISTING TREX DECKING AND CURBING AND PROVIDE NEW HARDWARE WHEN REINSTALLING.  
4.) PROVIDE NEW TREX DECKING MATERIAL FOR 50% OF SQUARE FOOTAGE TO REPLACE DAMAGED MATERIALS.  
5.) REMOVE AND REINSTALL MIDDLE TREX 6x6 SUPPORT FOR BENCH. PROVIDE TRT 6x6 AS BLOCKING TO RAISE BENCH HEIGHT ON NEW DECK.

GENERAL NOTES:

- 1.) CONTRACTOR SHALL COORDINATE ACCESS TO THE SITE WITH OWNER'S ON-SITE PROJECT MANAGER.
- 2.) CONTRACTOR SHALL MAINTAIN A MEANS OF FOOT TRAFFIC ACCESS TO THE OYSTER LANDING PIER HEAD AND EQUIPMENT DURING CONSTRUCTION ACTIVITIES.
- 3.) ALL EFFORTS SHALL BE MADE TO MINIMIZE CONSTRUCTION ACTIVITIES' IMPACT TO SURROUNDING MARSH. FOOT TRAFFIC AND TEMPORARY BRACING SHALL BE LIMITED TO WITHIN FOUR FEET OF THE EXISTING WALKWAYS AND STRUCTURES WHERE APPLICABLE. ACTIVITIES OF FURTHER DISTURBANCE SHALL BE APPROVED BY OWNER'S ON-SITE PROJECT MANAGER PRIOR TO COMMENCEMENT.
- 4.) GENERAL CONSTRUCTION WASTE AND DEMOLISHED MATERIALS SHALL BE CARRIED AND DISPOSED OF OFFSITE. CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE AND NOT ALLOW ANY CONSTRUCTION DEBRIS, GARBAGE, LIQUIDS, OR OTHER WASTES TO ENTER THE MARSH.
- 5.) ALL NEW CONNECTORS SHALL BE A MINIMUM OF HOT DIPPED GALVANIZED OR STAINLESS STEEL PER THE FOLLOWING:
- | FASTENER        | CORROSION PROTECTION  |
|-----------------|-----------------------|
| THRU/LAG BOLTS  | HOT-DIPPED GALVANIZED |
| SCREW FASTENERS | 316 STAINLESS STEEL   |
| CONNECTORS      | 316 STAINLESS STEEL   |
- 6.) ALL NEW TIMBERS AND DIMENSIONAL LUMBER TO BE INSTALLED SHALL BE MIN. NO. 2 SOUTHERN YELLOW PINE AND PRESURE-TREATED WITH AN APPROPRIATE PRESERVATIVE TO SATISFY THE FOLLOWING APWA USE CATEGORIES:
- | MEMBER              | USE CATEGORY |
|---------------------|--------------|
| PILES               | UC5B         |
| X-BRACING/PILE CAPS | UC5B         |
| JOISTS/STRINGERS    | UC4B         |
| DECKING             | UC3B         |
- 7.) ALL COMPOSITE MATERIALS REPLACED WITH NEW ON SALT MARSH BOARDWALK SHALL BE TREX MATERIALS, UNLESS APPROVED OTHERWISE BY OWNER.

REVISION SCHEDULE	
NO.	DESCRIPTION
1	DATE: 6/30/2017
2	DATE: 6/30/2017
3	DATE: 6/30/2017
4	DATE: 6/30/2017
5	DATE: 6/30/2017
6	DATE: 6/30/2017
7	DATE: 6/30/2017
8	DATE: 6/30/2017
9	DATE: 6/30/2017
10	DATE: 6/30/2017
11	DATE: 6/30/2017
12	DATE: 6/30/2017

MARINE LAB PIER REPAIRS	
PROJECT	CRAB HAUL ROAD
LOCATION	HOBCEW-BARONY
PREPARED FOR	UNIVERSITY OF SOUTH CAROLINA
	743 GREENE ST.
	COLUMBIA, SC 29208
SMB: REPAIRS	

PROJECT: 171052.001	DATE: 6/30/2017	SCALE: #####	DESIGNED BY: SGS	DRAWN BY: DHC	CHECKED BY: SGS
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06/30/2017

REVISION SCHEDULE			DATE:	DESCRIPTION	BY
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	12		$\frac{1}{2}$ " $\frac{1}{2}$ " $\frac{1}{2}$ "	XXXX	

PROJECT: MARINE LAB PIER REPAIRS	LOCATION: CRAB HAUL ROAD HOBCAW-BARONY	PREPARED FOR: UNIVERSITY OF SOUTH CAROLINA 1010 GREENING COLUMBIA, SC 29208	SMB: SECTIONS
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PROJECT: 171052.001
DATE: 6/30/2017
SCALE: SEE PLANS
DESIGNED BY: SGS
DRAWN BY: DHC
CHECKED BY: SGS

[illegible]



STRUCTURAL NOTES:

A. GENERAL

1.

THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE, AND TO ENSURE THE STABILITY OF THE BUILDING AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS, DURING ERECTION. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY BRACING OR TIEDOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT. THE ENGINEER TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOB SITE SAFETY DURING CONSTRUCTION. PROCESSING AND/OR APPROVING SUBMITTALS MADE BY THE CONTRACTOR WHICH MAY CONTAIN INFORMATION RELATED TO CONSTRUCTION METHODS OR SAFETY ISSUES, OR PARTICIPATION IN MEETINGS WHERE SUCH ISSUES MIGHT BE DISCUSSED, SHALL NOT BE CONSTRUED AS VOLUNTARY ASSUMPTION BY THE ENGINEER OF ANY RESPONSIBILITY FOR SAFETY PROCEDURES.
2.

IT IS SOLELY THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE ENGINEER DOES NOT SUPERVISE, CONSTRUCTION UNLESS CONTRACTED TO DO SO. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.
3.

EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL COORDINATE THIS INFORMATION WITH THE INVOLVED TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK. EXCESS COST RELATED TO VARIATION IN THESE REQUIREMENTS TO BE BORNE BY THE APPROPRIATE CONTRACTOR.
4.

SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN. DO NOT SCALE THESE DRAWINGS. USE DIMENSIONS.
5.

GOVERNING CODE: INTERNATIONAL BUILDING CODE 2015 FOR COMMERCIAL AND INTERNATIONAL RESIDENIAL CODE FOR RESIDENTIAL CONSTRUCTION IN ACCORDANCE WITH ASCE 7-10 BUILDING RISK CATEGORY II  $I_e = 1.0$ ,  $I_s = 1.0$ ,  $I_w = 1.0$
6.

WIND DESIGN PARAMETERS

a.

WIND SPEED  $V_{ult} = 150$  MPH /  $V_{asd}=116$  MPH

b.

WIND EXPOSURE = EXPOSURE C

c.

MAIN WIND DESIGN PRESSURE: 34 PSF (END ZONE) 26 PSF (INTERNAL)

d.

MEAN ROOF HT.: <30'-0"

e.

MAX. ROOF UPLIFT: -28 PSF (END ZONE) -24 PSF (INTERNAL)

f.

INTERNAL PRESSURE COEFFICIENT FOR

g.

ENCLOSED STRUCTURE  $q_i=+/- 0.18$   
PARTIALLY ENCLOSED  $q_i=+/- 0.55$   
OPEN STRUCTURE  $q_i= 0.00$
7.

SEISMIC DESIGN PARAMETERS

a.

DESIGN SPECTRAL ACCELERATION PARAMETERS  
 $S_{ds}=0.513$   $S_{d1}=0.267$

b.

SEISMIC USE GROUP 1

c.

SEISMIC DESIGN CATEGORY = CATEGORY D

d.

SITE CLASS D

e.

BASIC STRUCTURAL SYSTEM -- BEARING WALLS

f.

SEISMIC RESISTING SYSTEM -- LIGHT FRAME WALLS W/ WOOD SHEAR PANELS

g.

RESPONSE MODIFICATION FACTOR (R) = 6.5

h.

SEISMIC BASE SHEAR = 0.1W

i.

ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE
8.

LOADING

a.

FLOOR DEAD LOAD 20+ PSF

b.

FLOOR LIVE LOAD 50+ PSF

c.

DECK LIVE LOAD 80+ PSF
9.

COMMERCIAL PROJECTS ARE DESIGNED TO MEET REQUIREMENTS OF 2015 INTERNATIONAL BUILDING CODE FOR WIND AND SEISMIC LOADS. SEE ALSO DESIGN CRITERIA.
10.

SOIL: FOUNDATION DESIGN BASED ON MINIMUM BEARING CAPACITY OF 2000 PSF. CONTRACTOR TO VERIFY SOIL CONDITIONS PRIOR TO PLACEMENT OF CONCRETE. ORGANIC SOILS TO BE REMOVED AND STRUCTURAL FILL PLACED AND COMPACTED PRIOR TO CONCRETE PLACEMENT. CONTRACTOR TO NOTIFY OWNER IF SOIL CONDITIONS DO NOT HAVE ADEQUATE BEARING CAPACITY.
11.

NOTE ON TREATED LUMBER CONNECTIONS - ALL NAILS, BOLTS, SCREWS, AND CONNECTORS THAT MAY COME INTO CONTACT WITH TREATED LUMBER WILL BE HOT DIPPED GALVANIZED (HDG), STAINLESS STEEL (SS), OR OTHER MATERIALS APPROVED BY THE MANUFACTURE TO MINIMIZE CORROSION CAUSED BY ACQ TREATMENT CHEMICALS.

B. REINFORCED CONCRETE:

1.

MATERIALS:

a.

SPECIFICATIONS: IN GENERAL, COMPLY WITH ACI 318-02 "SPECIFICATIONS FOR STRUCTURAL CONCRETE."

b.

STRUCTURAL CONCRETE:

LOCATION

FOOTINGS

3000

MONOLITHIC SLABS ON GRADE, AND ALL INTERIOR CONCRETE NOT OTHERWISE IDENTIFIED.

3500

RAISED STEMWALL SLABS AND CONCRETE ON GRADE, PIERS, AND ALL EXTERIOR CONCRETE NOT OTHERWISE IDENTIFIED.

3000

BACKFILL BELOW FOOTINGS (MUD MAT)

2000

c.

ALL DEFORMED REINFORCING BARS: FY = 60,000. ASTM A-615 GRADE 60

d.

MIXES: ALL CONCRETE MIXES SHALL BE DESIGNED BY THE SUPPLIER TO MEET THE REQUIREMENTS SET FORTH HEREIN. SLUMP: MAXIMUM ALLOWABLE SLUMP FOR CONCRETE SHALL BE 4" UNLESS OTHERWISE NOTED OR APPROVED. IF HIGHER SLUMP IS DESIRED TO INCREASE WORKABILITY, CONTRACTOR SHALL CONSULT WITH CONCRETE SUPPLIER ABOUT USING A CONCRETE ADDITIVE THAT WILL INCREASE SLUMP WITHOUT INCREASING WATER/CEMENT RATIO OF THE CONCRETE. THE CONTRACTOR SHALL VERIFY THAT ANY CONCRETE ADDITIVES WILL NOT HAVE ANY DETRIMENTAL EFFECTS ON EMBEDDED ITEMS, FINISHES INDICATED ON PLANS OR LIKELY FUTURE FINISHES.

e.

FINISHING: FINISHING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301 (LATEST EDITION), CURING: BEGINNING IMMEDIATELY AFTER PLACEMENT, CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING, EXCESSIVELY HOT OR COLD TEMPERATURES, AND MECHANICAL INJURY, AND SHALL BE MAINTAINED WITH MINIMAL MOISTURE LOSS AT A RELATIVELY CONSTANT TEMPERATURE FOR THE PERIOD NECESSARY FOR THE HYDRATION OF THE CEMENT AND HARDENING OF THE CONCRETE. THE MATERIALS AND METHODS OF CURING SHALL CONFORM TO ACI 301.
2.

FIELD MANUAL: PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.
3.

MISCELLANEOUS

a.

BENT BARS, IF REQUIRED, SHALL BE BENT PER MANUFACTURE RECOMMENDATION, UNLESS OTHERWISE APPROVED.

b.

PROVIDE SUPPORTS AS REQUIRED TO MAINTAIN ALIGNMENT OF SCHEDULED REINFORCING.
4.

SLABS:

a.

CONCRETE SLABS ON GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 302.1R-96 "GUIDE FOR CONCRETE"

b.

CONTROL JOINTS SHALL BE SPACED IN INTERIOR SLABS ON GRADE AT A MAXIMUM OF 20'-0" O/C, AND IN EXTERIOR SLABS, ON GRADE AT A MAXIMUM OF 10'-0" O/C UNLESS NOTED.

c.

CONTROL JOINTS SHALL BE PRODUCED USING CONVENTIONAL PROCESSES WITHIN 4 TO 12 HOURS AFTER THE SLAB HAS BEEN FINISHED. REINFORCING SHALL NOT EXTEND THROUGH THE CONTROL JOINT.

d.

CONSTRUCTION JOINTS PERMITTED ONLY WHERE SHOWN OR AS APPROVED BY THE STRUCTURAL ENGINEER. ALL CONSTRUCTION JOINTS ARE TO BE KEYS. KEYWAYS SHALL BE 1-1/2 INCHES DEEP X 1/3 MEMBER THICKNESS.

e.

PROVIDE 6 MIL POLYETHYLENE VAPOR BARRIER BETWEEN SUBGRADE & CONCRETE SLAB.

f.

PREPARE SITE BY REMOVING ORGANIC/EXPANSIVE SOILS AND COMPACTING TO 95% PROCTOR DRY DENSITY.

g.

SLAB FINISHES: (A) ALL OFFICE SPACES, RETAIL, RESIDENTIAL AND SIMILAR SLABS, SHALL HAVE A MACHINE FINISH WITH 1/8" PER 10'-0" TOLERANCE. (B) ALL EXTERIOR, WET SURFACE, DRIVEWAYS, SIDEWALKS AND SIMILAR SLABS SHALL BE FINISHED WITH ROUGH NON-SKID SURFACE (BROOM FINISH). BRUSH LINES IN THE FINISH SHALL BE PARALLEL TO DIRECTION OF SLOPE.

h.

THE CONCRETE SLAB-ON-GRADE HAS BEEN DESIGNED USING A SUBGRADE MODULUS OF K=250 PCI AND A DESIGN LOADING OF 2000 PSF. THE STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR DIFFERENTIAL SETTLEMENT, SLAB CRACKING OR OTHER FUTURE DEFECTS RESULTING FROM UNREPORTED CONDITIONS MITIGATING THE ABOVE ASSUMPTIONS.

i.

REINFORCEMENT FOR SLAB ON GRADE SHALL BE PLACED AT A LOCATION B/N THE CENTER AND UPPER THIRD OF THE SLAB
5.

FOOTINGS AND PIERS:

a.

DOWELS IN FOOTINGS TO MATCH VERTICAL PIER OR WALL REINFORCING.

b.

PROVIDE CORNER BARS AT FOOTING CORNERS TO MATCH HORIZONTAL REINFORCING. MINIMUM LAP LENGTH WITH HORIZONTAL REINFORCEMENT = 35 BAR DIAMETERS.

c.

BACKFILL AGAINST BOTH SIDES OF WALLS EQUALLY UNTIL THE LOWER ELEVATION IS ATTAINED.

d.

PROVIDE MIN. 18 INCH THICK LAYER OF GRANULAR BACKFILL FULL HEIGHT OF ALL FOUNDATION WALLS.

e.

CAST IN CONTINUOUS DOVE TAIL ANCHOR SLOTS ON VERTICAL SURFACES WHERE MASONRY ABUTS, 16 INCHES O.C. FOR PARALLEL SURFACES, AT CENTERLINE OF MASONRY FOR PERPENDICULAR SURFACES.

f.

PROVIDE LEAN CONCRETE UNDER FOUNDATIONS FOR ACCIDENTAL OVER- EXCAVATION, SOFT SPOTS AND TRENCHES.

g.

VENTILATING FOUNDATION WALL OPENINGS SHALL BE WITHIN 3' OF EACH CORNER OF THE BUILDING. AREA OF OPENINGS SHALL NOT BE LESS THAN 1 SQ. FT. FOR EACH 150 SQ. FT. OF UNDERFLOOR SPACE AREA.
6.

SPLICES: UNLESS NOTED OTHERWISE, MINIMUM LAP SPLICE LENGTHS TO BE AS FOLLOWS:

a.

VERTICAL BARS 30 DIAMETERS (INCLUDING DOWELS)

b.

HORIZONTAL BARS IN SLABS & FOOTINGS 30 DIAMETERS
7.

CONCRETE COVER: UNLESS NOTED OTHERWISE, DETAIL REINFORCING TO PROVIDE CONCRETE COVER AS FOLLOWS:

a.

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3 INCHES

b.

CONCRETE EXPOSED TO EARTH OR WEATHER: #5 BARS AND SMALLER OTHERS 1-1/2 INCHES

c.

CONCRETE NOT EXPOSED TO EARTH OR WEATHER: SLABS 1 INCH ALL OTHERS 1-1/2 INCHES

d.

PILE CAPS 2-1/2 INCHES
8.

MISCELLANEOUS:

a.

GROUT UNDER COLUMN BASE PLATES SHALL BE NON-SHRINKING TYPE. THE USE OF LEVELING PLATES AT COLUMN BASES IS PROHIBITED. GROUT BELOW BEARING PLATES, SETTING PLATES, AND COLUMN BASE PLATES IS TO BE INSTALLED ONLY AFTER THE STEEL IS PLUMBED.

C. STRUCTURAL LUMBER

1.

MATERIALS:

a.

STRUCTURAL LUMBER INCLUDING BEARING AND EXTERIOR WALL STUDS: MINIMUM PROPERTIES OF SPRUCE-PINE-FIR #2, ALLOWABLE STRESSES PER THE NATIONAL DESIGN SPECIFICATION SUPPLEMENT 2005 EDITION, 19% MAX. M.C. OTHER ACCEPTABLE SPECIES INCLUDE HEM-FIR, SOUTHERN PINE, AND DOUGLAS FIR-LARCH.

b.

PLYWOOD: FOR ROOFS.....OSB OR C-D PLUGGED, 5-PLY, EXPOSURE 1, 7/16" THICK. FOR WALLS.....OSB OR C-D PLUGGED, 5-PLY, EXPOSURE 1, 7/16" THICK.

c.

OSB: FOR WALLS NOT AT SHEAR WALLS: 7/16" INCH THICK WITH PANEL INDEX W24, EXPOSURE 1.

d.

ALL FRAMING EXPOSED TO THE WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION SPECIFICATIONS. WHERE POSSIBLE ALL EXPOSED CUTS AND HOLES SHOULD BE COMPLETED BEFORE TREATMENT. CUTS AND HOLES DUE TO ON SITE FABRICATION SHALL BE BRUSHED WITH 2 COATS OF COPPER NAPHTHENATE SOLUTION CONTAINING A MINIMUM OF 2% METALLIC COPPER IN SOLUTION (PER AWPA STD. M4)
2.

SPECIFICATIONS: UNLESS SPECIFICALLY SHOWN OTHERWISE, DESIGN, FABRICATION AND ERECTION SHALL BE GOVERNED BY THE LATEST EDITION OF:

a.

NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.

b.

U.S. PRODUCT STANDARD PS1
3.

CONNECTIONS:

a.

JOISTS TO SIDES OF BEAMS: 16 GA. GALVANIZED STD. JOIST HANGERS, UNLESS SHOWN OTHERWISE.

b.

JOISTS AND TRUSSES TO TOPS OF WALLS AND BEAMS: 18 GA. GALVANIZED HURRICANE ANCHORS.

c.

PLYWOOD TO ROOF TRUSSES OR RAFTERS: NAILED - USE 8d RING SHANK NAILS AT 3 INCHES O/C AT PANEL EDGES AND 6 INCHES O/C AT INTERMEDIATE SUPPORTS (UNLESS NOTED OTHERWISE). PROVIDE PLYWOOD CLIPS AT MID-SPAN OF PLYWOOD BETWEEN SUPPORTS.

d.

ALL METAL CONNECTIONS SHALL BE SIMPSON OR USP. ALL CONNECTORS TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS. CONTACT ENGINEER WITH QUESTIONS PERTAINING TO HOLDOWNS SPECIFIED ON PLANS.

e.

STUD COLUMNS SHALL BE SECURED WITH 2 ROWS OF 10d NAILS @ 24" O.C. (UNLESS NOTED OTHERWISE)

f.

LOAD VALUES FOR 8d, 10d, 16d AND 20d DESIGNATIONS IN THE FASTENER SCHEDULES THROUGHOUT THIS CATALOG REFER TO COMMON WIRE NAILS UNLESS NOTED OTHERWISE. NAILS SHALL CONFORM TO A RECOGNIZED NATIONAL STANDARD, SUCH AS ASTM F1667, AS PRESCRIBED BY THE MODEL BUILDING CODES.
5.

STRUCTURAL WOOD PANELS

a.

FABRICATION AND PLACEMENT OF STRUCTURAL WOOD SHEATHING SHALL BE IN ACCORDANCE WITH THE APA DESIGN/CONSTRUCTION GUIDE " RESIDENTIAL AND COMMERCIAL," AND ALL OTHER APPLICABLE APA STANDARDS.

b.

ALL STRUCTURALLY REQUIRED WOOD SHEATHING SHALL BEAR THE MARK OF THE AMERICAN PLYWOOD ASSOCIATION.

c.

WOOD WALL SHEATHING SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE. WOOD WALL SHEATHING SHALL BE CONTINUOUS OVER TWO SUPPORTS AND ATTACHED TO ITS SUPPORTING WALL FRAMING WITH (1)- 8d CC NAIL @ 3" O.C. AT PANEL EDGES AND AT 6" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS. SHOULD A CONFLICT OCCUR BETWEEN THESE DRAWINGS AND THE FOREMENTIONED CODE REFERENCES, THE MORE STRINGENT SHALL GOVERN.

d.

ROOF SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ROOF SHEATHING SHALL BE CONTINUOUS OVER TWO SUPPORTS AND ATTACHED TO IT'S SUPPORTING ROOF FRAMING WITH (1)- 8d CC NAIL AT 3" O.C. AT PANEL EDGES AND AT 6" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS. SHEATHING SHALL BE APPLIED WITH THE LONG DIRECTION PERPENDICULAR TO FRAMING. SHEATHING SHALL HAVE A SPAN RATING CONSTANT WITH THE FRAMING SPACING. USE SUITABLE EDGE SUPPORT BY USE OF PLYWOOD CLIPS OR LUMBER BLOCKING UNLESS OTHERWISE NOTED. PANEL END JOINTS SHALL OCCUR OVER FRAMING. APPLY BUILDING PAPER OVER SHEATHING AS REQUIRED BY THE INTERNATIONAL RESIDENTIAL BUILDING CODE.

e.

WOOD FLOOR SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2 ATTACH SHEATHING TO IT'S SUPPORTING FRAMING WITH (1)-8d CC RING-SHANK NAIL AT 6" O.C. @ PANEL EDGES AND @ 12" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS. SHEATHING SHALL BE APPLIED PERPENDICULAR TO FRAMING. SHEATHING SHALL HAVE A SPAN RATING CONSTANT WITH THE FRAMING SPACING. USE SUITABLE EDGE SUPPORT BY USE OF T&G PLYWOOD OR LUMBER BLOCKING UNLESS OTHERWISE NOTED. PANEL END JOINTS SHALL OCCUR OVER FRAMING. APPLY BUILDING PAPER OVER THE SHEATHING AS REQUIRED BY THE STATE BUILDING CODE.

f.

SHEATHING EDGES SHALL HAVE A 1/8" GAP AT ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE APA.

EARTHWORKS

planning and design consultants

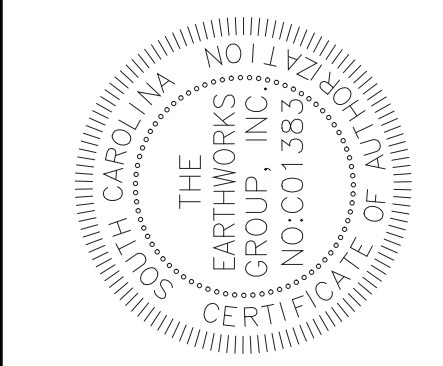
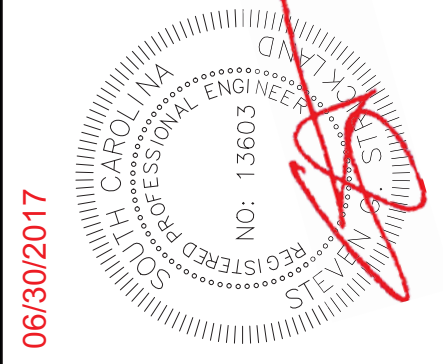
11655 HIGHWAY 707

MURRELLS INLET, SC 29576

843.651.7900

(FAX) 843.651.7903

www.earthworksgroup.com



REVISION SCHEDULE		BY	
NO.	DESCRIPTION	DATE	BY
1		---	---
2		---	---
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12		---	---

PROJECT: MARINE LAB PIER REPAIRS

LOCATION: CRAB HAUL ROAD

PREPARED FOR: HOBCAW-BARONY

UNIVERSITY OF SOUTH CAROLINA

743 GREENE ST

COLUMBIA, SC 29208

STRUCTURAL NOTES

PROJECT: 171062.001	DATE: 6/30/2017	SCALE: SEE PLANS	DESIGNED BY: SGS	DRAWN BY: DHC	CHECKED BY: SGS
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