



**Purchasing Department  
113 Mable T. Willis Blvd.  
Walterboro, SC 29488  
843.782.0504**

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**BID: FM-53  
CHEHAW PIER REPLACEMENT**

**Due: Thursday, January 21, 2021 @ 11:00am**

**EMAIL YOUR RESPONSE TO:**

**Kaye B. Syfrett, Procurement Manager at [ksyfrett@colletoncounty.org](mailto:ksyfrett@colletoncounty.org)**

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## A. OVERVIEW

Colleton County, South Carolina (the "**County**") requests bids from qualified, licensed contractors for the Chehaw Pier Replacement project which consists of construction of a new fixed aluminum pier, relocation of existing floating courtesy dock, new aluminum gangway, and associated pilings located at 6619 Wiggins Road, Green Pond SC 29446. The debris will be disposed of per the SC Department of Health and Environmental Control (DHEC) guidelines.

This project is being funded by the South Carolina Department of Natural Resources, and the U.S. Department of the Interior. All bids and contracts shall meet the requirements enumerated in the specifications and contract documents.

All Contractors and Sub-contractors are required to be registered with the Federal Government website; System for Award Management (SAM) at [www.sam.gov](http://www.sam.gov), and to comply with the President's Executive Order No. 11246 & Order No. 11375 which prohibits discrimination in employment regarding race, creed, color, sex, or national origin. Contractors must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act, the Contract Work Hours and Safety Standards Act, and 40 CFR 33.240.

The County requests that all contractors respond with an actual bid or with a written "No Bid." These provision guards against receiving an insufficient response to the Advertisement of Bids.

To be considered responsive, responders must use the Bid Form included in the specifications. Subject to the terms, conditions, provisions, and the enclosed specifications, responses to this solicitation will be received at this office until the stated date and time. Responses received after the scheduled due date and time will be rejected. Bids must be submitted in a sealed package marked on the outside with the Contractor's name, address, the solicitation name, and number.

Any prospective contractor or sub-contractor who is aggrieved in connection with the solicitation of this contract may protest to Colleton County in accordance with Section 11-35-4210 of the SC Code of Laws, within 15 days of the date of issuance of the Notice of Intent to Award.

**There is no Mandatory Pre-Bid meeting.** Bidders may inspect the site at their convenience.

Questions regarding this solicitation must be submitted via email to **John Stieglitz, Capital Projects Director** at [jstieglitz@colletoncounty.org](mailto:jstieglitz@colletoncounty.org) no later than **11:00AM on Wednesday, January 13, 2021**. Answers to all questions will be posted on the County website as an addendum to this bid.

## B. SCOPE OF SERVICES

Chehaw Pier Replacement project consists of the construction of a new fixed aluminum pier, relocation of existing floating courtesy dock, new aluminum gangway and associated pilings located at 6619 Wiggins Road, Green Pond SC 29446. The debris will be disposed of per the SC Department of Health and Environmental Control (DHEC) guidelines.

- The contractor must be licensed as a General Contractor in the State of South Carolina and will hold all Trade Contracts and the Building Permit on the project.
- It is the contractor's responsibility to walk the property.
- Project will be completed within **120 days** of the "Notice to Proceed."
- Landfill Fees will not be waived.
- All permits are the requirements of the contractor and may include but not limited to; Colleton County building, SCDHEC, SCDNR.

- All permits previously approved and accepted by Colleton County shall become the responsibility of the contractor.

The County reserves the right to accept or reject any bid in whole or in part and to award a contract that is in the best interest of the County.

“Equal Employment Opportunity”

## C. INSTRUCTIONS TO BIDDER

1. The submittal must include **one (1) original BID** response marked as original along with a completed **W-9 form**. The individual signing the response must be an Agent legally authorized to bind the company. To be considered responsive, responders must use the Bid Form included in the specifications.
2. All bids are due by **11:00am on Thursday, January 21, 2021. Responses must be submitted via email to Kaye B. Syfrett, Procurement Manager at [ksyfrett@colletoncounty.org](mailto:ksyfrett@colletoncounty.org).**
3. It is the contractor’s sole responsibility to ensure that solicitation responses, amendments thereto, or withdrawal requests are submitted by the scheduled due date and time.
4. The contractor must mark as "Confidential" each part of their response, which they consider to be proprietary information that could be exempt from disclosure under Section 30-40(C) Code of Laws of South Carolina, 1976, Freedom of Information Act. Colleton County reserves the right to determine whether this information should be exempt from disclosure and legal action may not be brought against the County or its agents for its determination in this regard.
5. **RESPONSE FORM:** All responses shall be printed in ink or typewritten. If required, additional pages may be attached. Bids written in pencil will be disqualified.
6. Subject to the terms, conditions, provisions, and the enclosed specifications, responses to this solicitation will be received at this office until the stated date and time. Responses received after the scheduled due date and time will be rejected. Bids must be submitted in a sealed package marked on the outside with the Firm’s name, address, and the solicitation name and number.
7. This solicitation does not commit Colleton County to award a contract, to pay any costs incurred in the preparation of BID submitted, or to procure or contract for the services. The County reserves the right to accept or reject or cancel in part, or its entirety offers received as a result of this request is deemed to be in the best interest of the County to do so.

**A written “No Response” qualifies as a response; however, it is the responsibility of the Contractor to notify the Procurement Office if you receive solicitations that do not apply.**

## D. SELECTION CRITERIA

1. It is the intent of Colleton County to award one contract to the lowest responsive, responsible bidder based on the total bid submitted on the Bid Form with final approval by the County Council. Colleton County reserves the right to reject any or all bids and to award a contract that is most advantageous, and in the best interest of the County and its partners.

2. Upon an Intent of Notice to Award being issued along with final approval by SC Department of Natural Resources, and if needed, County Council, a contract will be executed for the requested services.

## E. SPECIFIC TERMS AND CONDITIONS

1. **COMPETITION:** This solicitation is intended to promote full and open competition. If any language, specifications, terms, and conditions, or any combination thereof restricts or limits the requirements in this solicitation to a single source, it shall be the responsibility of the interested vendor to notify the Procurement Office in writing no later than five (5) business days before the scheduled due date and time.
2. **RESPONDENTS QUALIFICATION:** The County reserves the right to request satisfactory evidence of their ability to furnish services per the terms and conditions listed herein. The County further reserves the right to make the final determination as to the Firm's ability to provide said services.
3. **RESPONSE WITHDRAWAL:** Any responses may be withdrawn before the established closing date and time, but not thereafter with proper approval from the Procurement Manager.
4. **REJECTION:** Colleton County reserves the right to reject any or all bids, to cancel or withdraw this solicitation, and to waive any technicality if deemed to be in the best interest of the County.
5. **WAIVER:** The County reserves the right to waive any Instructions to Contractor, General or Special Provisions, General or Special Conditions, or specifications deviation if deemed to be in the best interest of the County.
6. **RESPONSE PERIOD:** All responses shall be good for a minimum period of 90 calendar days.
7. **DEVIATIONS FROM SPECIFICATIONS:** Any deviation from specifications indicated herein must be pointed out; otherwise, it will be considered that items offered are in strict compliance with these specifications, and the successful contractor will be held responsible, therefore. Deviations must be explained in detail on a separate attached sheet(s). The listing of deviations, if any, is required but will not be construed as waiving any requirements of the specifications. Unidentified deviations found during the evaluation of the response may be cause for rejection.
8. **AMENDMENTS:** All amendments to and interpretations of this solicitation shall be in writing and issued by the Procurement Manager of Colleton County.
9. **DEBARMENT:** By submitting a bid, the contractor is certifying that they are not currently debarred from responding to any request for bids by any agency or subdivision of the State of South Carolina or the United States Federal Government, nor are they an agent of any person or entity that is currently debarred from submitting bids on contracts by any agency or subdivision of the State of South Carolina or the United States Federal Government.
10. **DEFAULT:** In case of default by the Contractor, the County reserves the right to purchase any or all items in default in the open market, charging the Contractor with any excessive costs. Should such charge be assessed, no subsequent solicitation response of the defaulting Contractor will be considered in future BID's, until the assessed charge has been satisfied.
11. **HOLD HARMLESS:** All respondents to this BID shall indemnify and hold harmless Colleton County Government and any of their officers and employees from all suits and claims alleged to be a result

of this request for bids. The issuance of this request of bids constitutes only an invitation to present a bid. Colleton County reserves the right to determine, at its sole discretion, whether any aspect of a respondent's submittal meets the criteria in this request for bids. Colleton County also reserves the right to seek clarifications, to negotiate with any firm submitting a response, to reject any or all responses with or without cause, and to modify the procurement process and schedule.

12. CANCELLATION: In the event, this request for bids is withdrawn or the project canceled for any reason, Colleton County shall have no liability to any respondent for any costs or expenses incurred in connection with this request for proposals or otherwise.
13. COLLETON COUNTY PURCHASING ORDINANCE: The Request of Bids is subject to the provisions of the Colleton County Purchasing Ordinance and any revisions thereto, which are hereby incorporated into this BID in their entirety except as amended or superseded within. This ordinance can be found at <https://www.municode.com/library/sc/colletoncounty/codes/codeofordinances> under Title 3 - Revenue and Finance.
14. FAILURE TO SUBMIT ALL MANDATORY FORMS: Failure to submit all the mandatory forms from this request of bids shall be just cause for rejection. However, Colleton County reserves the right to decide, on a case by case basis, in its sole discretion, whether or not to reject such a bid as non-responsive.
15. CONTRACT AWARD:
  - a. This solicitation and submitted documents, when properly accepted by Colleton County shall constitute an agreement equally binding between the successful Contractor and the County. No oral statement of any person shall modify or otherwise change, or affect the terms, conditions, or specifications stated in the resulting agreement. The County shall not be legally bound by any amendment or interpretation that is not fully executed by both parties in writing.
  - b. The successful contractor shall be required to execute a formal agreement with the County's Procurement Office within ten (10) business days after issuance of the Notice of Award.
16. CONTRACT ADMINISTRATION: Questions or problems arising after award of an agreement shall be directed to the Procurement Manager by calling (843) 782-0504. Copies of all correspondence concerning this solicitation or resulting agreement shall be sent to the Purchasing Department, 113 Mable T. Willis Blvd, Walterboro, SC 29488.

## F. GENERAL CONTRACTUAL REQUIREMENTS

1. ABANDONMENT OR DELAY: If the work to be done under this contract shall be abandoned or delayed by the Contractor, or if at any time the County shall believe and shall so certify in writing that work has been abandoned or delayed by the Contractor, the County may annul the contract or any part thereof if the Contractor fails to resolve the matter within thirty (30) days of written notice.
2. CONTRACTOR'S COOPERATION: The Contractor shall maintain regular communications with the Project Manager and shall actively cooperate in all matters pertaining to this contract.

3. **RESPONSIBILITY:** The Contractor shall at all times observe and comply with all federal, state, local and municipal laws, ordinances, rules, and regulations in any manner affecting the contract.
4. **NON-APPROPRIATION/SUBSTITUTION PERMITTED:** If the Colleton County Council fails to appropriate or authorize the expenditure of sufficient funds to provide the continuation of this contract or if a lawful order issued in, or for any fiscal year during the term of the agreement, reduces the funds appropriated or authorized in such amounts as to preclude making the payments set out therein, the agreement shall terminate on the date said funds are no longer available without any termination charges or other liability incurring to County. Following any such non-appropriation, the master lease agreement shall contain no limitation on the County's ability to replace the equipment financed with any other equipment.
5. **INDEMNIFICATION:** Except for expenses or liabilities arising from the negligence of the County, the Contractor hereby expressly agrees to indemnify and hold the County harmless against any or all expenses and liabilities arising out of the performance or default of any resulting agreement or arising from or related to the Work as follows:

The Contractor expressly agrees to the extent that there is a causal relationship between its negligence, action or inaction, or the negligence, action or inaction of any of its employees or any person, contractor, or corporation directly or indirectly employed by the Contractor, and any damage, liability, injury, loss or expense (whether in connection with bodily injury or death or property damage or loss) that is suffered by the County and its employees or by any member of the public, to indemnify and save the County and its employees harmless against any or all liabilities, penalties, demands, claims, lawsuits, losses, damages, costs, and expenses arising out of the performance or default of any resulting agreement or arising from or related to the equipment. Such costs are to include defense, settlement, and reasonable attorneys' fees incurred by the County and its employees. This promise to indemnify shall include bodily injuries or death occurring to Contractor's employees and any person, directly or indirectly employed by the Firm (including without limitation any employee of any subcontractor), the County's employees, the employees of any other independent contractor, or occurring to any member of the public. When the County submits notice, the Firm shall promptly defend any aforementioned action.

The prescribed limits of insurance set forth herein shall not limit the extent of the Contractor's responsibility under this Section. The terms and conditions contained in this Section shall survive the termination of any resulting agreement or the suspension of the Work hereunder. Additionally, the County will not provide indemnity to the successful FIRM. Failure to comply with this section may result in your request for proposal to be deemed non-responsive.

6. **FORCE MAJEURE:** The Contractor shall not be liable for any excess costs if the failure to perform the resulting agreement arises out of causes beyond the control and without fault or negligence of the Contractor. Such causes may include, but are not restricted to acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case, the failure to perform must be beyond the control and without the fault or negligence of the contractor. If the failure to perform is caused by default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and subcontractor and without excess costs for failure to perform unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the contractor to meet the required delivery schedule.
7. **ARBITRATION:** Under no circumstances and with no exception will Colleton County act as arbitrator between the Contractor and any sub-contractor.

8. **PUBLICITY RELEASES:** The Firm agrees not to refer to the award of this contract in commercial advertising in such a manner as to state or imply that the products or services provided are endorsed or preferred by the County. The Contractor shall not have the right to include the County's name in its published list of customers without prior approval of the County Administrator. Concerning news releases, only the name of the County, type, and duration of any resulting agreement may be used and then only with prior approval of the County. The Contractor also agrees not to publish, or cite in any form, any comments or quotes from the County's staff unless it is a direct quote from the Procurement Manager.
9. **GOVERNING LAWS:** Any agreement arising from this solicitation shall be governed by the laws of the State of South Carolina and any or all disputes arising out of said agreement shall, if litigation is necessary, be litigated only in a Circuit Court for the Fourteenth Judicial Circuit sitting in Colleton County, South Carolina. The prevailing party shall be entitled to attorney's fees and all costs of said litigation.
10. **ASSIGNMENT:** The Contractor shall not assign in whole or in part any agreement resulting from this Request for Bids without the prior written consent of the County. The Contractor shall not assign any money due or to become due to him under the said agreement without the prior written consent of the County.
11. **AFFIRMATIVE ACTION:** The successful Contractor will take affirmative action in complying with all Federal and State requirements concerning fair employment and treatment of all employees, without regard or discrimination because of race, color, religion, sex, national origin, or physical handicap.
12. **FAILURE TO DELIVER GOODS IN ACCORDANCE WITH TERMS & CONDITIONS:** In case of failure to deliver goods in accordance with the contract terms and conditions, Colleton County, after due oral or written notice, may procure substitute goods or services from other sources and hold the contractor responsible for any resulting additional purchasing and administrative costs. This remedy shall be in addition to any other remedies which Colleton County may have.
13. **TERMINATION OF CONTRACT:**
  1. Subject to the provisions below, the contract may be terminated by the Purchasing Department providing a thirty (30) days advance notice in writing is given to the Contractor.
    - a. Termination for Convenience: If this contract is terminated or canceled upon request and for the convenience of the County without the required thirty (30) days advance written notice, then the County shall negotiate reasonable termination costs, if applicable.
    - b. Termination for Cause: Termination by the County for cause, default, or negligence on the part of the Contractor shall be excluded from the foregoing provisions; termination costs, if any, shall not apply. The thirty (30) days advance notice requirement is waived and the default provision in this request for bids shall apply.
    - c. The County shall be obligated to reimburse the Contractor only for those services rendered before the date of notice of termination, less any liquidation damages that may be assessed for non-performance.
  2. Non-Appropriations Clause: Notwithstanding any other provisions of the contract, if the funds anticipated for the continued fulfillment of this contract are at any time. Not forthcoming, through the failure of the County Government to appropriate funds, discontinuance or material alteration of the program under which funds were provided, the



County shall have the right to terminate the contract without penalty by giving not less than thirty (30) days written notice documenting the lack of funding. Unless otherwise agreed to by the County and the Contractor, the contract shall become null and void on the last day of the fiscal year for which appropriations were received.

14. BONDS: A 100% Payment and Performance Bond are required for this BID.
15. OWNERSHIP OF MATERIAL: Ownership of all data, material, and documentation originated and prepared for the County according to this contract shall belong exclusively to the County.
16. INSURANCE: Colleton County will require the following remain in force at all times through the life of the contract:

Professional Liability Insurance – Minimum \$1,000,000.00 - Proof of in-force insurance must be provided in the response to the RFP

Other insurances:

Workers' Compensation - \$100,000 – each accident

Statutory Coverage and Employer's - \$100,000 for each employee

Liability - \$500,000 – policy limit

Comprehensive General Liability -\$1,000,000 – bodily injury each occurrence

\$1,000,000 – bodily injury aggregate

\$1,000,000 – property damage each occurrence

\$1,000,000 – property damage aggregate

Products – Completed Operations - \$1,000,000 – aggregate

Business Auto Liability – Same as Comprehensive General Liability

Excess or Umbrella Liability - \$1,000,000

Colleton County will be named as an "additional insured" party

17. PAYMENTS TO CONTRACTOR: Payments will be based on a schedule of values as outlined in the specifications. All payments are subject to owner acceptance of project progress.
18. RETAINAGE: Retainage from progress payments to the Contractor shall be **ten percent** (10%) of the payment for work completed. No reduction of retainage will be allowed at substation completion or completion.

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**BID: FM-53**  
**CHEHAW PIER REPLACEMENT**  
**ADDENDA ACKNOWLEDGMENT**

The contractor has examined and carefully studied the Request for Bid and the following Addenda, receipt of all of which is hereby acknowledged:

Addendum No. \_\_\_\_\_

Addendum No \_\_\_\_\_

Addendum No. \_\_\_\_\_

Addendum No. \_\_\_\_\_

\_\_\_\_\_  
Authorized Representative/Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Authorized Representative/Title (Print)

***The Contractor must acknowledge any issued addenda. Bids that fail to acknowledge the contractor's receipt of any addendum will result in the rejection of the offer if the addendum contained information that substantively changes the Owner's requirements or pricing.***

**THIS PAGE MUST BE COMPLETED AND SUBMITTED AS A PART OF YOUR BID**



**BID: FM-53**  
**CHEHAW PIER REPLACEMENT**  
**INDEMNIFICATION**

The contractor will indemnify and hold harmless the Owner, Colleton County and their agents and employees from and against all claims, damages, losses, and expenses, including attorney's fees, arising out of or resulting from the performance of the Work provided that any such claims, damages, loss, or expense are attributable to bodily injury, sickness, disease or death, injury to or destruction of tangible property, including the loss of use resulting therefrom, and is caused by any negligent or willful act or omission of the Firm, and anyone directly or indirectly employed by him/her or anyone for whose acts any of them may be liable.

In any or all claims against the Owner, Colleton County or any of their agents and/or employees by an employee of the Contractor, and anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way to the amount or type of damages, compensation or benefits payable by or for the Contractor under the Worker's Compensation Acts, Disability Benefit Acts, or other employee benefit acts.

The obligation of the Firm under this paragraph shall not extend to the liability of Colleton County or its agents and/or employees arising out of the reports, surveys, Change Orders, designs, or Technical Specifications.

**Company Name:** \_\_\_\_\_

**Contact Person:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**THIS PAGE MUST BE COMPLETED AND SUBMITTED AS A PART OF YOUR BID**



**BID: FM-53**  
**CHEHAW PIER REPLACEMENT**  
**CERTIFICATE OF FAMILIARITY**

The undersigned, having fully familiarized him/her with the information contained within this entire solicitation and applicable amendments, submits the attached response, and other applicable information to the County, which I verify to be true and correct to the best of my knowledge. I further certify that this response is made without prior understanding, agreement, or connection with any corporation, contractor, or person submitting a response for the same materials, supplies or equipment, and is in all respects, fair and without collusion or fraud. I agree to abide by all conditions outlined in this solicitation and certify that I have signature authority to bind the company listed herein.

**MINORITY BUSINESS:** Are you a minority business?

▶ **Yes** \_\_\_\_\_ ( \_\_\_\_\_ *Women-owner/* \_\_\_\_\_ *Disadvantaged*) *if yes, please submit a copy of your certificate with your response.*

▶ **No** \_\_\_\_\_

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Authorized Representative/Title (Print)

**THIS PAGE MUST BE COMPLETED AND SUBMITTED AS A PART OF YOUR BID**



**BID: FM-53**  
**CHEHAW PIER REPLACEMENT**  
**DEBARMENT**

The Contractor is certifying that they are not currently debarred from responding to any request for bids by any agency or subdivision of the State of South Carolina or the United States Federal Government, nor are they an agent of any person or entity that is currently debarred from submitting bids on contracts by any agency or subdivision of the State of South Carolina or the United States Federal Government.

SAM's No. \_\_\_\_\_

Cage Code. \_\_\_\_\_

DUN's No. \_\_\_\_\_

\_\_\_\_\_  
Authorized Representative/Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Authorized Representative/Title (Print)

**THIS PAGE MUST BE COMPLETED AND SUBMITTED AS A PART OF YOUR BID**



**BID: FM-53**  
**CHEHAW PIER REPLACEMENT**  
**BID FORM**

BASE BID PROPOSAL: Bidder/Proposer agrees to perform all of the work described in the solicitation document FM-53 to include the Specifications, General Conditions, and items shown on the drawings, for the sum of:

\_\_\_\_\_ \$ \_\_\_\_\_  
(Amount in words) (Numerical)

**Company Name:** \_\_\_\_\_

**Contact Person:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City/State/Zip:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Cell Phone Number:** \_\_\_\_\_

**E-mail Address:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Contractor's License No:** \_\_\_\_\_

**THIS PAGE MUST BE COMPLETED AND SUBMITTED AS A PART OF YOUR BID**

# COLLETON COUNTY– OLD CHEHAW LANDING FIXED PIER REPLACEMENT

## TECHNICAL SPECIFICATIONS

*Engineer*

Andy Wicker, PE  
1000 Assembly Street  
Columbia, South Carolina 29202

(803) 542-2729  
(803)734-4101 fax  
wickera@dnr.sc.gov

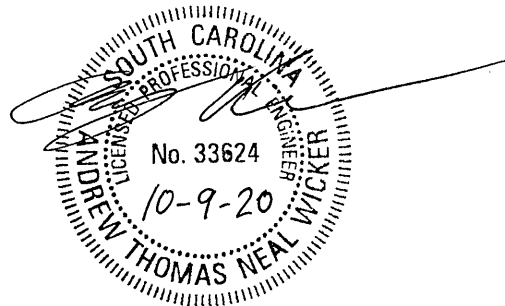
Date: September 30, 2020

**COLLETON COUNTY – OLD CHEHAW FIXED PIER REPLACEMENT**

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## SECTION 01000

### GENERAL REQUIREMENTS

#### 1. GENERAL

##### 1.1 OWNER

THE TERM "OWNER" AS USED IN THE CONTRACT DOCUMENTS IS DEFINED AS SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES.

##### 1.2 SCOPE OF WORK

The work under this contract includes the furnishing of all labor, materials, equipment, and all items and services of every nature whether particularly mentioned or not that is required to complete the **construction of a new fixed aluminum pier, relocation of existing floating courtesy dock, new aluminum gangway, and associated pilings as shown and described on the drawings and specifications.**

##### 1.3 GENERAL DRAWINGS AND SPECIFICATIONS

All work is to be done in accordance with drawings and specifications and any permit conditions of state, federal, local or any other agencies having jurisdiction.

The Contractor shall carefully check all drawings and advise the Owner if any errors or omissions are discovered. The Contractor shall not take advantage of any errors or omissions, as Owner will furnish full instructions if any errors or omissions are discovered.

##### 1.4 OWNER FURNISHED MATERIALS ANDEQUIPMENT

Materials and equipment, indicated on the drawings as "Not in Contract", and "Not Included in Contract" will be furnished and installed by Owner, unless specified otherwise hereinafter.

##### 1.5 STORAGE OF MATERIALS

The Contractor shall limit the storage of materials to areas designated during pre-construction conference. The Contractor shall be responsible for the coordination of all material deliveries.

##### 1.6 LIGHTS AND POWER

The Contractor shall furnish all temporary light and power, including all wiring, lamps and miscellaneous equipment required for the completion and inspection of the work. The Contractor will pay all costs for power required for use in the execution of the work, including fuel for any tests, etc.

##### 1.7 WATER

The Contractor shall furnish and pay all cost for water used in the execution of the work, and shall provide any temporary water lines required.

##### 1.8 TEMPORARY HEAT

The Contractor shall provide temporary heat as is required for construction purposes and to protect and dry all work during cold weather. The Contractor shall pay the costs of all temporary heat required during construction.

##### 1.9 LINES, GRADES AND MEASUREMENTS

The Contractor shall establish all necessary working lines and grades from the basic reference lines and benchmarks, and shall be responsible for accuracy of the same.

#### 1.10 SHOP DRAWINGS

Two copies of any shop drawings are to be provided to the Owner. Shop Drawings shall be submitted for all components of the prefabricated wooded structure and as requested for other items.

#### 1.13 AFFIDAVIT

On final completion of the contract, but prior to making final payment, the Contractor shall execute an Affidavit on standard forms certifying that all work under the contract has been completed, that all bills for labor and materials and bills for subcontractors incurred in connection with the performance of his contract have been paid in full.

#### 1.14 SCHEDULING

From the date of the commencement in the "Notice to Proceed", the **Contractor shall substantially complete the project within the time specified in the contract.** The schedule is critical to the Owner. Close coordination and cooperation on this project is a must. Final Completion is expected within 30 days of Substantial Completion.

### 2. PRODUCTS

#### 2.1 PRODUCT TYPE

All products are to be of the type specified, or if unspecified, shall meet the minimum industry or local standards. Substitution of specified materials will not be allowed except with written approval of the Owner.

### 3. EXECUTION

#### 3.1 EXISTING UTILITIES AND STRUCTURES

The approximate location of certain known underground lines and structures are shown on the plans for information only. Other underground utilities or structures are not shown. The Contractor shall locate these and other possible unknown utility lines by use of an electronic pipe finder, or other means he may prefer, and shall excavate and expose all existing underground lines in advance of the trenching operation. This Contractor will be held responsible for the workmanlike repair of any damage done to any of these utilities in the prosecution of his work under this contract. The Contractor shall familiarize himself with the existing conditions and be prepared to adequately care for and safeguard himself and the Owner from damage.

#### 3.2 DAMAGES DURING CONSTRUCTION

The Contractor shall not be paid for any damages to work by circumstances within or beyond his control, and he shall save the Owner harmless from any damages arising from his work obstructing or interfering with any existing utilities.

#### 3.3 PERMITS

The contractor will be responsible for any applicable fees to obtain the permits from the County. All other permits are obtained by the Owner and provided in this bid package.

#### 3.4 RIGHT-OF-WAY

The Owner will furnish the necessary land for the construction of the work. The Owner will provide no right-of-way over other property. The Contractor shall take every possible precaution to inconvenience as little as possible the owners or tenants of adjacent property. Public highways shall not be obstructed in such a way as to inhibit traffic flow. The Contractor shall, at his own expense, repair any damage or injury to either public or private property during the progress of the work. Wholesale cutting of trees will not be permitted, except as necessary for construction.

### 3.5 ACCESS ROADS

Streets, roads and drives used by the Contractor for access to and from the site of his work shall be protected from damage in excess of that caused by the normal traffic vehicles used for in connection with the construction work. Any such damage shall be repaired immediately and left in good condition at the end of the construction period.

### 3.6 UTILITIES

The Contractor shall make his own arrangements for all utilities required for the work.

### 3.7 REMOVAL OF OBSTRUCTIONS

The Contractor, may with the Owner's consent, remove obstructions to his operations, but they shall be removed and replaced at the Contractor's expense.

### 3.8 PROTECTING TREES, SHRUBBERY ANDLAWNS

Trees and shrubbery in developed areas and along trench lines shall not be disturbed unless absolutely necessary, and subject to the approval of the Owner. Any such trees and shrubbery necessary to be removed shall be heeled in and replanted. Where trenches cross private property through established lawns, sod shall be cut, removed, stacked and maintained in suitable condition until replacement is approved by the Owner. Topsoil underlying lawn areas shall be removed and kept separate from general excavated materials

### 3.9 RESTORATION AND DISTURBED AREAS

All areas disturbed by, during or as a result of construction activities shall be restored to their existing or better condition. This is not to be interpreted as a replacement of trees and undergrowth in undeveloped sections of the site.

### 3.10 PROTECTIVE WORK

The Contractor shall furnish and install all necessary temporary works for the protection of the work, including barricades, warning signs, and lights at night.

### 3.11 EMERGENCY WORK

The Contractor shall at all times (nights, weekends or holidays) have a responsible person available to act in case of emergency repairs who the Owner may contact. Upon notification of any emergency work necessary, the Contractor's representative shall immediately take steps to make such repairs.

### 3.12 CLEANING OF WORK SITE

At completion, the Contractor is to remove all surplus materials and other debris resultant from work and leave entire work site in satisfactory, acceptable, broom-clean condition.

### 3.13 VERIFICATION

Contractor to verify that existing gradients and elevations shown on the plans are correct. Commencement of work means acceptance of existing conditions.

#### 3.14 HOLD HARMLESS STATEMENT

The contractor will hold harmless the State, its agents, officers and employees from actions **by the contractor's employees, subcontractors, etc.**, involving construction of the project including violations of any permits or of any environmental laws or regulations.

## SECTION 01110

### SUMMARY OF WORK

#### PART 1 - GENERAL

##### 1.1 WORK COVERED BY CONTRACT DOCUMENTS

- A. Demolition: remove existing wooden pier and piles, and aluminum gangway.
- B. Structures: construct new aluminum fixed pier and gangway, and relocate existing floating courtesy dock.

##### 1.2 RELATED WORK

- A. Documents affecting work of this section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and sections in Division 1 of these specifications.

##### 1.3 SAFETY COMPLIANCE

- A. In addition to any detailed requirements of these specifications, the contractor shall meet the requirements of federal and state standards referenced in applicable publications, whichever is more restrictive. Matters of interpretation of these standards shall be submitted by the contractor to the respective administrative agency for resolution before starting work.

##### 1.4 PRECAUTION AND SAFETY

###### SPECIAL REQUIREMENTS

- A. Accident Prevention and Safety: Comply with all applicable laws, ordinances, rules, regulations and orders of governing authorities having jurisdiction for the safety of persons and property to protect them from damage, injury or loss. Erect and maintain, as required by conditions and progress of the work, all necessary safeguards for safety and protection, including fences, railings, barricades, lighting, posting of danger signs and other warnings against hazards. Where prevention of construction accidents is not regulated by code or ordinances, comply with AGC' s "Manual of Accident Prevention in Construction." Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Project. All scaffolds shall be built in accordance with all requirements of local, state and Federal laws and regulations.

##### 1.5 COORDINATION OF WORK SEQUENCE

- A. Coordinate work for the various sections of the Specifications to ensure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later.

- B. Verify characteristics that elements of interrelated operating equipment are compatible; coordinate work of various sections having interdependent responsibilities for installing, connection to, and placing in service, such equipment.
- C. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts and conduits, as closely as practicable; make runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas conceal pipes, ducts, and wiring in the construction. Coordinate locations of fixtures and outlets with finish elements.

1.6 TIME OF COMPLETION AND LIQUIDATED DAMAGES

- A. The Contract Performance Period shall be as in the contract and commence upon written Notice to Proceed.

1.7 SUBSTANTIAL COMPLETION INSPECTION AND PUNCH LIST:

- A. The contract has an established contract completion date. In order to avoid the assessment of liquidated damages, the contractor shall require in writing to the architect/engineer a substantial completion inspection on or prior to the established completion date. The contractor shall certify that all construction/installation is complete and has been checked out and is operating as designed. The architect/engineer shall notify the Owner in writing that the job is ready for inspection.

1.8 FINAL PUNCH LIST ITEMS:

- A. The contractor and sub-contractors shall have thirty (30) calendar days from the date of final inspection to complete the repair of any and all items listed on the final punch list.

**END OF SECTION**

## SECTION 01140 WORK

### RESTRICTIONS

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. Work Included: This section applies to situations in which the Contractor or his representatives including, but not necessarily limited to, suppliers, subcontractors, employees and field engineers, enter upon the Owner's property.
- B. Related Work: Documents affecting work of this section include, but are not necessarily limited to, General Conditions, Supplementary Conditions and Sections in Division 1 of these Specifications.

##### 1.2 QUALITY ASSURANCE

- A. Promptly upon the award of the Contract, notify all pertinent personnel regarding requirements of this Section.
- B. Require that all personnel who will enter upon the Owner's property certify their awareness of and familiarity with the requirements of this section.

##### 1.3 TRAFFIC CONTROL

- A. Contractor shall provide and maintain all regulatory construction signing, barricades, flagmen, etc. as needed to comply with the SCDOT standards during construction operations.

##### 1.4 SECURITY

- A. Restrict the access of all persons entering upon the Owner's property in connection with the work to the Contractor's Entrance and to the actual site of the work.

##### 1.5 CONTRACTOR USE OF PREMISES

- A. Confine operations at site to area permitted by Owner and Contract Documents.
- B. Do not unreasonably encumber site with materials or equipment
- C. Assume full responsibility for protection and safekeeping of products stored on premises.
- D. Move any stored products, which interfere with operations of Owner.

##### 1.7 OWNER OCCUPANCY

- A. N/A

##### 1.8 WORK IN, OR ADJACENT TO, EXISTING OR OCCUPIED AREAS

- A. N/A

1.9 CONTRACTOR CONDUCT

- A. The possession and/or use of drugs and alcohol on district property are prohibited.

**END OF SECTION**



## SECTION 01291

### SCHEDULE OF VALUES

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. Work included: Provide a detailed breakdown of the agreed Contract Sum showing values allocated to each of the various parts of the Work, as specified herein and in other provisions of the Contract Documents.
- B. Related Work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  - 2. Schedule of Values is required to be compatible per Owner requirements. The AIA Form G703 and "Form A" are preferred.

##### 1.2 QUALITY ASSURANCE

- A. Use required means to assure arithmetical accuracy of the sums described.
- B. When so required by the Construction Manager and/or Architect, provide copies of the subcontractor's Schedule of Values or other data acceptable to the Construction Manager and/or Architect, substantiating the sums described.

##### 1.3 SUBMITTALS

- A. Format and Content:
  - 1. Identification: Include the following Project identification on the Schedule of Values:
    - a. Project name and location.
    - b. Name of the Architect/Engineer.
    - c. Project number.
    - d. Contractor's name and address.
    - e. Date of submittal.
  - 2. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Break principal subcontract amounts down into several line items.
  - 3. Round amounts off to the nearest whole dollar; the total shall equal the Contract Sum.
  - 4. For each part of the Work where an Application for Payment may include materials or equipment, purchased or fabricated and stored, but not yet installed, provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
  - 5. Schedule Updating: Update the Schedule of Values when Change Orders or Construction Change Directives result in a change in the Contract Sum.

- B. Prior to first application for payment, submit a proposed schedule of values to the Construction Manager.
1. Meet with the Construction Manager and determine additional data, if any required to be submitted.
  2. Secure the Construction Manager's approval of the schedule of values prior to submitting first application for payment. **NO APPLICATIONS FOR PAYMENT WILL BE PROCESSED PRIOR TO APPROVAL OF THE SCHEDULE OF VALUES.**

**END OF SECTION**

## SECTION 01320

### PROGRESS SCHEDULE

#### PART 1 - GENERAL

##### 1.0.1 WORK INCLUDED

- A. To assure adequate planning and execution of the Work so that the Work is completed within the number of calendar days allowed in the Contract, and to assist the Architect/Engineer in evaluating progress of the Work, prepare and maintain the schedules and reports described in this Section.
- B. Work shall be performed in accordance with the Construction Schedule.

##### 1.0.2 RELATED WORK

- A. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these specifications.

##### 1.0.3 DEFINITIONS

- A. "Day", as used throughout the Contract unless otherwise stated, means "calendar day".

##### 1.0.4 QUALITY ASSURANCE

- A. Perform data preparation, analysis, charting and updating in accordance with standards approved by the Owner and/or Engineer.

##### 1.0.5 SUBMITTALS

- A. Comply with pertinent provisions of Section 01300, Submittals.
- B. Construction schedule: After the Contractor has received the Owner's Notice to Proceed, the Contractor shall provide the Architect/Engineer with sufficient information on his plan for completing all work under this Contract. The Contractor shall provide a detailed bar chart (CPM Method) of this work clearly showing how his schedule integrates with the total construction duration. This bar chart schedule must include the following applicable activities: subcontract awards, material purchase dates and delivery dates, manpower levels broken down by trades and plant and equipment to be used. All interface activities and tasks which must be completed by other trades prior to proceeding with the work must be shown on the bar chart schedule. Submit one (1) reproducible copy of a construction schedule for review.
- C. Periodic revisions and reports: Submit one (1) reproducible copy of the construction schedule updated along with the monthly payment request.

#### PART 2 - PRODUCTS

##### 1.0.1 CONSTRUCTION ANALYSIS

- A. Graphically show by bar-chart the order and interdependence of all activities necessary to complete the work, and the sequence in which each activity is to be accomplished, as planned by the Contractor and his project field superintendent in

coordination with all subcontractors.

## **PART 3 - EXECUTION**

### **3.0.1 CONSTRUCTION SCHEDULE**

- A. Immediately after receipt of Notice to Proceed meet with the Engineer/Owner, review contents of the proposed construction schedule, and make all revisions agreed upon.
- B. The Construction Schedule shall indicate the key points of interface between the work under this contract and the other work of the project and the major project milestones. Sequencing and coordinating of miscellaneous activities will be discussed and agreed upon in the weekly meetings. It is agreed and understood that the schedule dates shown in the Construction Schedule for the indicated interface points and project milestones may change during the course of the Contract and such changes, in and of themselves, will not entitle the Contractor to any additional compensation or be deemed to constitute an extension of time or to constitute a change under Article 7 of the General Conditions for the Contract for Construction.
- C. Every effort will be made to make progress on the work as expeditiously as possible and if critical path activities can be improved during the course of the work, the Construction Schedule shall be revised to reflect improved dates on all work activities.
- D. The Contractor shall award all subcontracts, purchase materials, arrange for deliveries, furnish sufficient forces, plant and equipment and work such hours as necessary to insure execution of the work in conformity with the project duration.
- E. In the event of material procurement delays, the Contractor shall immediately notify the Architect/Engineer. However, it will be assumed that the Contractor has checked material deliveries as specified prior the Bid, as submission of a Bid for work will be assumed to be an agreement to the time frame allocated for that work as noted per the total project duration.
- F. If the Contractor falls behind the Construction Schedule, or current approved revision of the Construction Schedule, and is not entitled to any time extension as determined by the Architect/Engineer, he shall, upon request of the Architect/Engineer, submit within forty-eight (48) hours his plan for bringing his work back up to schedule. This plan shall include a commitment for immediate implementation, unless otherwise approved by the Architect/Engineer, and must include a time commitment, acceptable to the Architect/Engineer, for bringing the work up to schedule. If the Contractor fails to provide an acceptable plan within the requested time, he will be given a mandatory plan by the Architect/Engineer.
- G. The Contractor's plan shall illustrate his proposed methods for bringing his work back up to schedule, whether by a normal 40 hour work week, or by working 24 hours a day if necessary. If other measures will not be sufficient to make up the lag, the

Contractor's plans and implementation thereof shall include increasing the number of shifts, days of work and/or instituting or increasing overtime, all at his own expense.

- H. If a Contractor fails or refuses to implement such measures as will bring his work back up to conformity with the approved Schedule, his right to proceed with any or all portions of the Contract requirements may be terminated pursuant to Article 14 of the General Conditions for the Contract for Construction.

### 3.0.2 PERIODIC REVISIONS AND REPORTS

- A. The approved construction schedule shall be updated monthly and submitted along with each monthly payment application.
  - 1. Indicate "actual" progress in percent completion for each activity.
  - 2. Provide written narrative summary of revisions causing delay in the program, and an explanation of corrective actions taken or proposed.

### 3.0.4 REVISIONS

- A. The Contractor will be given ample notice on any schedule changes that may affect the starting dates of his work. Periodic schedule review and revision meetings will be held with the Contractors who will be expected to provide input to the scheduling activities. The latest approved revision of the Construction Schedule shall be part of the Contract Documents and shall be complied with by the Contractor at no extra cost to the Owner. Activity duration period shown on the Construction Schedule will not be reduced without the approval of the Contractor nor will they be increased without the approval of the Architect/Engineer.
- B. Make only those revisions to approved construction schedule as are approved in advance by the Architect/Engineer.

### 3.0.5 REQUEST FOR EXTENSION DUE TO DELAYS

- A. It is understood that the Owner or Architect/Engineer shall not in any event be liable to the Contractor for delays of any kind whatsoever and the Contractor shall be fully responsible for making up lost time of all delays except to the extent that extensions of time are granted. If completion of the work is delayed by any act of neglect of the Owner or the acts of the Architect/Engineer, by strikes or by other exceptional conditions over which the Contractor has no reasonable control, the time of completion shall upon receipt of the Contractor's written request, be extended by such period as the Architect/Engineer may consider reasonable. No extension shall be allowed unless a claim is presented in writing to the Engineer within seven (7) days after the commencement of such delay. In case of continued cause of delay, only one claim is necessary. Nothing in this clause shall be construed to release the Contractor from the obligation to perform at his own expense all overtime necessary to maintain the Contract completion date where delays have occurred which are not excused. If the Contractor, delayed by any acts of the Owner, Architect/Engineer, and is granted an extension of time by the Architect/Engineer, the Contractor shall comply with the extended schedule with no additional compensation from the Owner.

**END OF SECTION**

## SECTION 01330

### SUBMITTAL PROCEDURES

#### PART 1 - GENERAL

- A. The Contractor shall submit for review by the Architect/Engineer, Shop Drawings and schedules required by the Specifications, or that may be requested by the Architect/Engineer, and no work shall be fabricated by the Contractor, except at his own risk, until such review has been completed.

#### 1.1 FORM OF SUBMISSION MATERIALS

##### A. SHOP DRAWING SCHEDULE

1. Immediately after date of Notice to Proceed, each Contractor shall submit to the Architect/Engineer a Shop Drawing Submittal Schedule, which shall include the following minimum information:
  - a. List all items to be submitted for review referenced to the specific specifications section.
  - b. Name of subcontractor if applicable.
  - c. Supplier and date of purchase order.
  - d. Total fabrication and delivery time from time submittals are returned to the Contractor.
  - e. Scheduled delivery date.

(NOTE): No applications for payment will be processed unless the above listed information has been submitted.

##### B. SHOP DRAWINGS

1. Scale and Measurements: Make Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the work.
2. Review comments of the Architect/Engineer will be shown on submittal when it is returned to the Contractor. The Contractor may make and distribute such copies as are required for his purposes.

##### C. MANUFACTURER'S LITERATURE

1. Where contents of submitted literature from manufacturers include data not pertinent to the submittal, clearly show which portions of the contents are being submitted for review.

##### D. SAMPLES

1. Provide Sample or Samples identical to the precise article proposed to be provided. Identify as described under "Identification of Submittals" below.
2. Number of Samples required:

- a. Unless otherwise specified, submit samples in the quantity which is required to be returned, plus three which will be retained by the Architect/Engineer.
- b. By prearrangement in specific cases, a single sample may be submitted for review and, when approved, be installed in the Work at a location agreed upon by the Architect/Engineer.

#### E. COLORS AND PATTERNS

1. Unless the precise color and pattern is specifically called out in the Contract Documents, and whenever a choice of color or pattern is available in the specified products, submit accurate color and pattern charts to the Architect/Engineer for selection.
2. No colors will be selected by the Architect/Engineer until all colors are submitted. If a color selection is needed prior to final approval of the color schedule, Contractor shall notify Architect/Engineer of which items need early color selection, provide color charts and date that selection must be made to keep project on schedule.

### 1.2 SUBMISSION PROCEDURE

#### A. IDENTIFICATION OF SUBMITTALS

1. Multiple submittals on a single transmittal are not acceptable. Accompany each submittal with a letter of transmittal showing all information required for identification and checking.
2. Consecutively number all submittals.
  - a. When material is resubmitted for any reason, transmit under a new letter of transmittal and with a new transmittal number.
  - b. On re-submittals, cite the original submittal number for reference.
3. On at least the first page of each submittal, and elsewhere as required for positive identification, show the submittal number in which the item was included.
4. Maintain an accurate submittal log for duration of the Work, showing current status of all submittals at all times. Make the submittal log available to the Architect/Engineer for their review, upon request.
5. Provide number of copies required by Contractor plus two copies for Architect/Engineer.

#### B. GROUPING OF SUBMITTALS

1. Unless otherwise specified, make submittals in groups containing all associated items to assure that information is available for checking each item when it is received.
  - a. Partial submittals may be rejected as not complying with the provisions of the Contract.
  - b. The Contractor may be held liable for delays so occasioned.
2. Provide a separate transmittal and drawing number for each item to be reviewed.

C. CHECKING SUBMITTALS PRIOR TO SUBMISSION

1. Prior to each submittal, carefully review and coordinate all aspects of each item being submitted.
2. Verify that each item and the submittal for it conform in all respects with the specified requirements.
3. The drawings submitted shall be marked with the name of the project, numbered consecutively and bear the signed and dated stamp of the approval of that Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for re-submission. If the shop drawings show variation from the requirements of the Contract because of standard shop practice or with reasons, the Contractor shall make specific mention of such variations in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment; otherwise, that Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though such shop drawings have been approved.

D. DELIVERY AND TIMING OF SUBMITTALS

1. All submittals shall be transmitted to the Architect/Engineer for review based upon their relative position in the Construction Schedule, or as follows:
  - a. Prior to Mobilizing On-Site
    1. Performance Bond
    2. Labor and Material Bonds
    3. Insurance Certificate
  - b. Following Notice to Proceed
    1. Shop Drawing Submittal Schedule (immediately)
    2. Schedule of Values (within 10 days)
    3. Superintendent's Resume (within 10 days)
    4. Detailed Construction Schedule (within 21 days)
    5. Subcontractor Listing (within 30 days)
    6. All Equipment & Furnishings submittals (within 90 days) UNO.
2. Shop drawing submittals shall be made far enough in advance, based on the approved Construction Schedule, to meet all installation dates as scheduled. This will require that sufficient lead time be allowed to address an adequate review period, securing necessary approvals, possible revisions and re-submittals, placing orders and securing delivery dates. A detailed Shop Drawing Submittal Schedule is included as part of the Pre-Bid Construction Schedule.
3. In scheduling, allow at least ten (10) working days for review by the Architect following his receipt of the submittal (plus transit time).

E. ARCHITECT/ENGINEER'S REVIEW

1. Review by the Architect/Engineer does not relieve the Contractor from responsibility for errors which may exist in the submitted data.
2. The review of Shop Drawings will be general and shall not be construed as:
  - a. Permitting any departure from the Contract Requirements.
  - b. Relieving the Contractor of the responsibility for any error in details,



dimensions or otherwise that may exist.

- c. Approving departures from additional details or instruction previously furnished by the Architect/Engineer.

3. Revisions:

- a. Make revisions required by the Architect/Engineer.
- b. If the Contractor considers any required revisions to be a change, he shall notify the Architect as provided for in Paragraph 4.7.7 of the General Conditions.
- c. Make only those revisions directed or approved by the Architect/Engineer.

4. If a drawing, as submitted, indicates a departure from the Contract requirements which the Architect/Engineer finds to be in the interest of the Owner and to be minor as not to involve a change in the Contract Price or time for performance, the Architect/Engineer may approve the drawing.

F. FINAL DISTRIBUTION OF SUBMITTALS

1. The Contractor shall be responsible for the distribution of the Shop Drawings and schedules within his own organization and to his subcontractors.
2. The Contractor will advise the Architect/Engineer of the date that reviewed shop drawings are forwarded to the manufacturers or fabricators. Un-priced copies of purchase orders placed with suppliers or fabricators are to be forwarded to the Architect/Engineer when orders are placed.

**END OF SECTION**

## SECTION 01500

### TEMPORARY FACILITIES

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division - 1 Specifications, apply to this Section.

##### 1.2 SUMMARY

- A. This Section specifies requirements for temporary services and facilities, including utilities, construction and support facilities, security and protection.
- B. Temporary utilities required include but are not limited to:
  - 1. Water service and distribution.
  - 2. Temporary electric power and light.
  - 3. Telephone service and fax machine.
  - 4. Storm and sanitary sewer.
- C. Temporary construction and support facilities required include but are not limited to:
  - 1. Temporary heat.
  - 2. Field offices and storage sheds.
  - 3. Temporary roads and paving.
  - 4. Sanitary facilities, including drinking water.
  - 5. Dewatering facilities and drains.
  - 6. Temporary enclosures.
  - 7. Temporary Project identification signs and bulletin boards as described at the end of this section.
  - 8. Waste disposal services.
  - 9. Rodent and pest control.
  - 10. Construction aids and miscellaneous services and facilities.
- D. Security and protection facilities required include but are not limited to:
  - 1. Temporary fire protection.
  - 2. Barricades, warning signs, lights.
  - 3. Sidewalk bridges or enclosure fence for the site.
  - 4. Environmental protection.

##### 1.3 SUBMITTALS

- A. Temporary Utilities: Submit reports of tests, inspections, meter readings, and similar procedures performed on temporary utilities.
- B. Implementation and Termination Schedule: Submit a schedule indicating implementation and termination of each temporary utility within 15 days of the date established for commencement of the Work.

##### 1.4 QUALITY ASSURANCE

- A. Regulations: Comply with industry standards and applicable laws and regulations if authorities having jurisdiction, including but not limited to:

1. Building Code requirements.
  2. Health and safety regulations.
  3. Utility company regulations.
  4. Police, Fire Department, and Rescue Squad rules.
  5. Environmental protection regulations.
- B. Standards: Comply with NFPA Code 241, "Building Construction and Demolition Operations", ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and NECA Electrical Design Library "Temporary Electrical Facilities."
1. Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services," prepared jointly by AGC and ASC, for industry recommendations.
  2. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with National Electric Code (NFPA 70).
- C. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

## 1.5 PROJECT CONDITIONS

- A. Temporary Utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of the permanent service.
- B. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous dangerous or unsanitary conditions, or public nuisances to develop or persist on the site.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Provide new materials. If acceptable to the Architect, undamaged, previously used equipment in serviceable condition may be used. Provide equipment suitable for use intended.
- B. Electrical Outlets; Provide properly configured NEMA polarized to prevent insertion of 110-120 volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for connection of power tools and equipment.
- C. Electrical Power Cords: Provide grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for connection of power tools and equipment.
- D. Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered glass enclosures, where exposed to breakage. Provide exterior fixtures where exposed to moisture.
- E. Heating Units: Provide temporary heating units that have been tested and labeled by UL, FM, or another recognized trade association related to the type of fuel being consumed.
- F. Temporary Offices: Provide prefabricated or mobile units or similar job-built construction with lockable entrances, operable windows and serviceable finishes. Provide heated and

air-conditioned units on foundations adequate for loading required.

- G. Temporary Toilet Units: Provide self-contained single-occupant toilet units of the chemical, aerated re-circulation, or combustion type, properly vented and fully enclosed with a glass fiber reinforced polyester shell or similar nonabsorbent material.
- H. First Aid Suppliers: Comply with governing regulations.
- I. Fire Extinguishers: Provide hand-carried, portable UL-rated, class "A" fire extinguishers for temporary offices and similar spaces. In other locations provide hand-carried, portable, UL-rated, class "ABC" dry chemical extinguishers, or a combination or extinguishers of NFPA recommended classes for the exposures.
  - 1. Comply with NFPA 10 and 214 for classification, extinguishing agent and size required by location and class of fire exposure.
- J. Security Fencing: Provide temporary 6' high chain link security fencing as indicated along construction limit lines.
- K. Temporary Project Sign: Provide construction sign as described by the Contract Documents. Locate as directed by Architect/Owner.

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
- B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed, or are replaced by authorized use of completed permanent facilities.
- C. Temporary Facilities to be by General Construction Contractor unless noted otherwise or needed by the respective prime contractors to commence, install or complete their required work.
- D. Once installed the cost of maintenance and monthly service charge for all utilities shall be borne by the general contractor.

#### **3.2 TEMPORARY UTILITY INSTALLATION**

- A. Unless otherwise noted the general contractor shall be responsible for providing and maintaining all temporary utilities and support facilities.
- B. Engage the appropriate local utility company to install temporary service or connect to existing service. Where the company provides only part of the service, provide the remainder with matching, compatible materials and equipment; comply with the company's recommendations.
  - 1. Arrange with the company and existing users for a time when service can be interrupted, where necessary, to make connections for temporary services.
  - 2. Provide adequate capacity at each stage of construction. Prior to temporary utility availability, provide trucked-in services.

3. Temporary (construction) power supplied by contractor and water may be obtained from the existing school facilities; however, the Owner must be consulted and approve exact location(s) and details prior to the taps. The Owner reserves the right to revoke this "privilege" if it is being abused and require the contractor(s) to obtain these services from other (off-site) means.
  4. Use Charges: Cost or use charges for temporary facilities are not chargeable to the Owner or Architect, and will not be accepted as a basis of claims for a Change Order.
- C. Water Service (Plumbing Contractor): Install water service and distribution piping of sizes and pressures adequate for construction until permanent water service is in use.
1. Sterilization: Sterilize temporary water piping prior to use.
  2. Permanent Tap: Tap fees and all materials and labor associated with permanent water service shall be provided by the plumbing contractor and coordinated and approved by governing authorities.
- D. Temporary Electric Power Service (Electrical Contractor): Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, overload protected disconnects, automatic ground-fault interrupters and main distribution switch gear.
1. Except where underground service must be used, install electric power service overhead.
  2. Power Distribution System: Install wiring overhead, and rise vertically where least exposed to damage. Where permitted, wiring circuits not exceeding 125 Volts, AC 20 ampere rating, and lighting circuits may be nonmetallic sheathed cable where overhead and exposed for surveillance.
- E. Temporary Lighting (Electrical Contractor): Whenever overhead floor or roof deck has been installed, provide temporary lighting with local switching.
1. Install and operate temporary lighting that will fulfill security and protection requirements, without operating the entire system, and will provide adequate illumination for construction operations and traffic conditions.
  2. The electrical contractor shall be responsible for all maintenance of temporary lighting.
- F. Temporary Telephones: Provide temporary telephone service for all personnel engaged in construction activities, throughout the construction period. Install telephone on a separate line for each temporary office and first aid station. Where an office has more than two occupants, install a telephone for each additional occupant or pair of occupants. Long distance charges will be paid for by the responsible prime contractor.
1. At each telephone, post a list of important telephone numbers.
- G. Sewers and Drainage: If sewers are available, providing temporary connections to remove effluent that can be discharged lawfully. If sewers are not available or cannot be used, provide drainage ditches, dry wells, stabilization ponds and similar facilities. If neither sewers nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off the site in a lawful manner.
1. Filter out excessive amounts of soil, construction debris, chemicals, oils and

similar contaminants that might clog sewers or pollute waterways before discharge.

2. Connect temporary sewers to the municipal system as directed by the sewer department officials.
  3. Maintain temporary sewers and drainage facilities in a clean, sanitary condition. Following heavy use, restore normal conditions promptly.
- H. Provide earthen embankments and similar barriers in and around excavations and sub-grade construction, sufficient to prevent flooding by runoff of storm-water from heavy rains.

### 3.3 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES INSTALLATION

- A. Locate field offices, storage sheds, sanitary facilities, and other temporary construction and support facilities for easy access.
1. Maintain temporary construction and support facilities until near Substantial Completion. Remove prior to Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to the Owner.
- B. Provide incombustible construction for offices, shops and sheds located within the construction area, or within 30 feet of building lines. Comply with requirements of NFPA 241.
- C. Temporary Heat: Provide temporary heat required by construction activities, for curing or drying of completed installations or protection of installed construction from adverse effects of low/high temperatures or high humidity. Select safe equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce the ambient conditions required and minimize consumption of energy. The general contractor shall not rely upon the permanent HVAC system being available during the construction period and shall be responsible for the heat required to install and maintain finishes and finish material until such time as permanent heat is available. The general contractor will be responsible for any cost associated with warrantee extension due to this action.
- D. Heating Facilities: Except where use of the permanent system is authorized, provide vented self-contained LP gas or fuel oil heaters with individual space thermostatic control.
1. Use of gasoline-burning space heaters, open flame, or salamander type heating units is prohibited.
- E. Contractor and Construction Manager Field Offices: Provide insulated, weather tight temporary offices of sufficient size to accommodate required office personnel at the Project site. Include in the base bid office space for the Architects, Construction Manager, and Owners use. Space must have indoor plumbing, HVAC, and be equipped with desks, table, and chairs as required. Keep the office clean and orderly for use for progress meetings. Furnish and equip offices as required but most importantly, plan table shall have most up-to-date set of plans and specs which shall serve as the "control set." Field Office shall have a conference room area for holding weekly and monthly project meetings with the Owner, Architect, Contractor and Construction Manager.
- F. Storage and Fabrication Sheds: Install storage and fabricated sheds, sized, furnished and equipped to accommodate materials and equipment involved, including temporary utility service. Sheds may be open shelters or fully enclosed spaces within the building or elsewhere on the site. Each contractor shall provide for their own storage requirements.

- G. Temporary Paving: Construct and maintain temporary roads and paving to adequately support the indicated loading and to withstand exposure to traffic during the construction period. Locate temporary paving for roads, storage areas and parking where the same permanent facilities will be located. Review proposed modifications to permanent paving with the Architect.
1. Paving: Comply with Division - 2 Section "Asphalt Concrete Paving" for construction and maintenance of temporary paving.
  2. Coordinate temporary paving development with sub-grade grading, compaction, installation and stabilization of sub-base, and installation of base and finish courses of permanent paving.
  3. Install temporary paving to minimize the need to rework the installations and to result in permanent roads and paved areas that are without damage to deterioration when occupied by the Owner.
  4. Delay installation of the final course of permanent asphalt concrete paving until immediately before Substantial Completion. Coordinate with weather conditions to avoid unsatisfactory results.
  5. Extend temporary paving in and around the construction area as necessary to accommodate delivery and storage of materials, equipment usage, administration and supervision.
- H. Sanitary facilities include temporary toilets, wash facilities and drinking water fixtures. Comply with regulations and health codes for the type, number, location, operation and maintenance of fixtures and facilities. Install where facilities will best serve the Project's needs.
- I. Dewatering facilities and drains: For temporary drainage and dewatering facilities and operations not directly associated with construction activities included under individual Sections, comply with dewatering requirements of applicable Division - 2 sections. Where feasible, utilize the same facilities. Maintain the site, excavations and construction free of water.
- J. Temporary Enclosures: Provide temporary enclosure for protection of construction in progress and completed, from exposure, foul weather, other construction operations and similar activities.
1. Where heat is needed and the permanent building enclosure is not complete, provide temporary enclosures where there is no other provision for containment of heat. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
  2. Install tarpaulins securely, with incombustible wood framing and other materials.
  3. Close openings through floor or roof deck and horizontal surfaces with load-bearing wood-framed construction.
- K. Temporary Lifts and Hoists: Provide facilities for hoisting materials and employees. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
- L. Project Identification and Temporary Signs: Prepare project identification and other signs of the size indicated; install signs where indicated to inform the public and persons seeking entrance to the Project. Support on posts or framing of preservative treated

wood to steel. Do not permit installation of unauthorized signs.

1. Project Identification Signs: Engage an experienced sign painter to apply graphics. Comply with details indicated.
  2. Temporary Signs: Prepare signs to provide directional information to construction personnel and visitors.
- M. Temporary Exterior Lighting: Install exterior yard and sign lights so that signs are visible when work is being performed.
- N. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F (27 deg C). Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner. The general contractor shall provide a dumpster for the use of all contractors on the job. Each prime shall reimburse the general for the disposal cost associated with their debris.
- O. Rodent and Pest Control: Before deep foundation work has been completed, retain a local exterminator or pest control company to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests. Employ this service to perform extermination and control procedures at regular intervals so the Project will be relatively free of pests and their residues at Substantial Completion. Perform control operations in a lawful manner using environmentally safe materials.

#### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Except for use of permanent fire protection as soon as available, do not change over from use of temporary security and protection facilities to permanent facilities until Substantial Completion, or longer as requested by the Architect.
- B. Temporary Fire Protection: Until fire protection needs are supplied by permanent facilities, install and maintain temporary fire protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10 "Standard for Portable Fire Extinguishers," and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations."
1. Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher on each floor at or near each usable stairwell.
  2. Store combustible materials in containers in fire-safe locations.
  3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, stairways and other access route for fighting fires. Prohibit smoking in hazardous fire exposure areas.
  4. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of fire ignition.
- C. Permanent Fire Protection: At the earliest feasible date in each area of the Project, complete installation of the permanent fire protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.
- D. Barricades, Warning Signs, and Lights: Comply with standards and code requirements of erection of structurally adequate barricades. Paint with appropriate colors, graphics and



warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed provide lighting, including flashing red or amber lights.

- E. Enclosure Fence: Prior to beginning construction, install an enclosure fence with lockable entrance gates. Locate where indicated, or enclose the portion determined sufficient to accommodate construction operations. Install in a manner that will prevent people, dogs, and other animals from easily entering the site, except by the entrance gates.
  - 1. Provide 6' high open-mesh, chain-link fencing with posts set in a compacted mixture of gravel and earth.
- F. Security Enclosure and Lockup: Install substantial temporary enclosure of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
  - 1. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.
- G. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways, and by methods that comply with environmental regulations, and minimize the possibility that air, waterways, and subsoil might be contaminated or polluted, or that other undesirable effects might result. Avoid use of tools and equipment which produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms near the site.

### 3.5 OPERATION, TERMINATION AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
  - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour day basis where required to achieve results and to avoid possibility of damage.
  - 2. Protection: Prevent water filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.
- C. Termination and Removal: Unless the Architect requests that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete, or if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
  - 1. Materials and facilities that constitute temporary facilities are property of the Contractor. The Owner reserves the right to take possession of Project identification signs.
  - 2. Remove temporary paving that is not intended or acceptable for integration into permanent paving. Where the area is intended for landscape development, remove soil and aggregate fill that does not comply with requirements for fill or subsoil in the area. Remove materials contaminated with road oil, asphalt, other petrochemical compounds, and other substances, which might impair growth of

plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at the temporary entrances, as required by the governing authority.

3. At Substantial Completion, clean and renovate permanent facilities that have been used during the construction period, including but not limited to:
  - a. Replace air filters and clean inside of ductwork and housings.
  - b. Replace significantly worn parts and parts that have been subject to unusual operating conditions.
  - c. Replace lamps that are burned out or noticeably dimmed by substantial hours of use.

**END OF SECTION**

## SECTION 01650

### PRODUCT DELIVERY AND HANDLING

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. Work included: Protect products scheduled for use in the work by means including, but not necessarily limited to, those described in this Section.
- B. Related work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, Sections in Division 1 of these specifications.
  - 2. Additional procedures also may be prescribed in other Sections of these specifications.

##### 1.2 QUALITY ASSURANCE

- A. Include within the Contractor's quality assurance program such procedures as are required to assure full protection of work and materials.

##### 1.3 MANUFACTURERS' RECOMMENDATIONS

- A. Except as otherwise approved by the Engineer, determine and comply with manufacturer's recommendations on product handling, storage and protection.

##### 1.4 PRODUCT DELIVERY

- A. Schedule delivery to minimize long-term storage at the site and to prevent overcrowding of construction spaces.
- B. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.

##### 1.5 PACKAGING

- A. Deliver products to the job site in their manufacturer's original container, with labels intact and legible.
  - 1. Maintain packaged materials with seals unbroken and labels intact until time of use.
  - 2. Promptly remove damaged material and unsuitable items from the job site and promptly replace with material meeting the specified requirements, at no additional cost to the Owner.
- B. The Engineer may reject as non-complying such material and products that do not bear identification satisfactory to the Engineer as to manufacturer, grade, quality and other pertinent information.

##### 1.6 PROTECTION OF MATERIAL AND WORK

- A. General
  - 1. Carefully and properly protect all materials of every description, both before and

after installation.

2. Provide any enclosing or special protection from weather as deemed necessary by the Engineer at no additional cost to the Owner.

B. Partial payments under the Contract will not relieve the Contractor from responsibility.

1. When materials and work at the site which have been partially paid for are not adequately protected by the Contractor, such materials will be protected by the Owner at the expense of the Contractor and no further partial payment thereon will be made.

C. Maintain finished surfaces clean, unmarred, and suitably protected until accepted by the Owner.

#### 1.7 STORAGE

- A. Store all items of equipment, component parts, etc. in accordance with the manufacturers' recommendations or as may otherwise be necessary to prevent damage or deterioration of any sort.

#### 1.8 REPAIRS AND REPLACEMENTS

A. In the event of damage, promptly make replacements and repairs to the approval of the Engineer and at no additional cost to the Owner.

B. Additional time required to secure replacements and to make repairs will not be considered by the Engineer to justify an extension in the contract time of completion.

**END OF SECTION**

## SECTION 01720

### PROJECT LAYOUT AND FIELD ENGINEERING

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. Work included: Provide such field engineering services, including survey and civil engineering, as are required for proper completion of the Work including, but not necessarily limited to:
  - 1. Establish and maintain all horizontal and vertical reference points, grades, lines and planes as required to construct project as indicated, specified, or both.
  - 2. Structural design of shores, forms and similar items provided by the Contractor as part of his means and methods of Construction.
- B. Related Work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  - 2. Additional requirements for field engineering also may be described in other Sections of these Specifications.

##### 1.2 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary craft and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of the Section.
  - 1. Surveyor: Engage a Registered Land Surveyor registered in the State where the project is located, to perform land surveying services required.
  - 2. Engineer: Engage a Professional Engineer of the discipline required, registered in the State in which the project is located, to perform required engineering services.

##### 1.3 SUBMITTALS

- A. Comply with pertinent provisions of Section 01330 - Submittal Procedures.
- B. Upon request of the Construction Manager and/or Architect, submit:
  - 1. Data demonstrating qualifications of persons proposed to be engaged for field engineering services.
  - 2. Documentation verifying accuracy of field engineering work.
  - 3. Certification, signed by a registered land surveyor, certifying that elevations and locations of improvements are in conformance with requirements of the Contract Documents. The cost for registered land surveyors shall be included in the Contractors bid.
- C. Final Property Survey: Prior to Substantial Completion, prepare a final property survey showing significant features that have resulted from construction of the project. Include a

certification signed by the surveyor that lines and levels of the project are accurately positioned as shown on the survey and in accordance with the contract documents.

## PART 2 - PRODUCTS

### 2.1 ENGINEERING EQUIPMENT

- A. Transit and measuring devices shall be calibrated to layout site and building work indicated.

### 2.2 OTHER LAYOUT EQUIPMENT

- A. Provide stakes and batter boards of size and quality to execute the work indicated, Use wire and non-stretching cord to establish lines for site, paving and building work.

## PART 3 - EXECUTION

### 3.1 BENCHMARKS

- A. The contractor shall maintain carefully all benchmarks, monuments and other reference points throughout execution of this work. If these are disturbed or destroyed, same shall be replaced and rest as directed by the Architect at Contractor's expense.

### 3.2 LAYOUT

- A. Stake building and site improvements relative to reference lines indicated on plan.
- B. Locate storage sheds, temporary office and topsoil stockpile so as to best advance progress of work and as approved by architect.

### 3.3 SITE CONDITIONS

- A. Before commencing work, verify benchmarks, reference points, and conditions where new work ties into existing work.

### 3.4 ADDITIONAL PROCEDURES

- A. In addition to procedures necessary for proper performance of the Contractor's responsibilities:
  1. Locate and protect control points before starting work on the site.
  2. Preserve a minimum of two permanent reference points during progress of the Work and through completion of the Work. Locate permanent reference points on as-built documents.
  3. Do not change or relocate reference points or items of the Work without specific approval from the Architect.
  4. Promptly advise the Construction Manager when a reference point is lost or destroyed, or required relocation because of other changes in the Work.
    - a. Upon direction of the Construction Manager, require the field engineer to replace reference stakes or markers.

- b. Locate such replacements according to the original survey control.
5. Existing utilities and equipment: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning any work, investigate and verify the existence and location of underground utilities and other construction.
- a. Prior to construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer and water service piping.

**END OF SECTION**

## SECTION 01730

### CUTTING AND PATCHING

#### PART 1 - GENERAL

##### 1.1 Description

- A. Work included: This Section establishes general requirements pertaining to cutting (including excavating), fitting and patching of the work required to:
  - 1. Make the several parts fit properly;
  - 2. Uncover work to provide for installing, inspection, both, of ill-timed work;
  - 3. Remove and replace work not conforming to requirements of the Contract Documents; and
  - 4. Remove and replace defective work.
- B. Related Work:
  - 1. Documents affecting work of this section include, but are not necessarily limited to, NCLC, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  - 2. In addition to other requirements specified, upon the Construction Managers and/or Architect's request to uncover work to provide for inspection by the Construction Manager and/or Architect of covered work, and remove samples of installed materials for testing.
  - 3. Do not cut or alter work performed under separate contracts without the Construction Manager's and Architect's written permission.

##### 1.2 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.

##### 1.3 SUBMITTALS

- A. Request for Construction Manager's and/or Architect's consent:
  - 1. Prior to cutting which effects structural safety, submit written request to the Construction Manager and/or Architect for permission to proceed with cutting.
  - 2. Should conditions of the Work, or schedule indicate a required change of materials or methods for cutting and patching, so notify the Construction Manager and/or Architect and secure his written permission and the required Change Order prior to proceeding.
- B. Notices to the Construction Manager and/or Architect:
  - 1. Prior to cutting and patching performed pursuant to the Construction Manager's and/or Architect's instructions, submit cost estimate to the Construction Manager and Architect. Secure the Construction Manager's and the Architect's approval of cost estimates and type of reimbursement before proceeding with cutting and patching.
  - 2. Submit written notice to the Construction Manager and/or Architect designating the



time the Work will be uncovered, to provide for the Construction Manager's and/or Architect's observation.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. For replacement of items removed, use materials complying with pertinent Sections of these Specifications.

### **2.2 PAYMENT FOR COSTS**

- A. The Owner will reimburse the Contractor for cutting and patching performed pursuant to the written Change Order, after claim for such reimbursement is submitted by the Contractor and approved by the Construction Manager and Architect. Perform other cutting and patching needed to comply with the Contract Documents at no additional cost to the Owner.

## **PART 3**

### **3.1 SURFACE CONDITIONS**

- A. Inspection:
  - 1. Inspect existing conditions, including elements subject to movement or damage during cutting, excavating, patching and backfilling.
  - 2. After uncovering the work, inspect conditions affecting installation of new work.
- B. Discrepancies:
  - 1. If uncovered conditions are not as anticipated, immediately notify the Construction Manager and/or Architect and secure needed directions.
  - 2. Do not proceed until unsatisfactory conditions are corrected.

### **3.2 PREPARATION PRIOR TO CUTTING**

- A. Provide required protection including, but not necessarily limited to, shoring, bracing and support to maintain structural integrity of the Work.
- B. Provide required fire protection including, but not necessarily limited to, fire blankets, fire extinguishing equipment, prior to consent from Construction Manager.

### **3.3 PERFORMANCE**

- A. Perform required excavating and backfilling as required under pertinent other Sections of these Specifications.
  - 1. Perform cutting and demolition by methods which will prevent damage to other portions of the Work and provide proper surfaces to receive installation of repair and new work.
  - 2. Perform fitting and adjusting of products to provide finished installation complying with the specified tolerances and finishes.
  - 3. All penetrations made by the Contractor through walls, ceilings, and/or floors shall be sealed by the Contractor to meet the requirements of all building codes, fire codes, applicable to this project.
  - 4. Extent of Cutting and Patching: Cut areas in new or existing work only to the extent required to perform the work. Cutting shall be in a manner that will not disturb

Cutting and Patching

adjoining work as much as possible and will facilitate patching in a sound and durable manner with invisible seams between the patched areas and the existing adjoining work. Patching shall restore area to match original finish to the satisfaction of the Architect. All rejected patched areas shall be removed and replaced to provide visually acceptable and durable work as directed by the Architect.

5. General: Employ skilled workmen to perform cutting and patching work. Except as otherwise indicated or as approved by the Architect, proceed with cutting and patching at the earliest feasible time and complete work without delay.
6. Cutting: Cut the work using methods that are least likely to damage work to be retained or adjoining work. Where possible review proposed procedures with the original installer; comply with original installer's recommendations.

In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut through concrete and masonry using a cutting machine such as a carborundum saw or core drill to insure a neat hole. Cut holes and slots neatly to size required with minimum disturbance of adjacent work. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces. Temporarily cover openings when not in use.

Comply with requirements of applicable sections of Division 2 where cutting and patching requires excavating and backfilling.

- a. Generally, unless other specified, work that requires cutting shall be performed by the traded performing the work.

7. Patching: Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.

Where feasible, inspect and test patched areas to demonstrate integrity of work.

Restore exposed finishes of patched areas and where necessary extend finish restoration into retained adjoining work in a manner which will eliminate evidence of patching and refinishing.

- a. Responsibility For Patching: The subcontractor will pay the masons on site to patch masonry walls that have to be cut for ductwork and any other larger opening. Holes in walls for pipe and conduit shall be drilled and grouted as required. Any damage to the fire rated construction will be the responsibility of the subcontractor to have properly repaired to meet the UL rating and meet approval of the Architect. The ultimate responsibility for all patching shall be on the General Contractor to provide an acceptable patch as determined by the Architect. All patching determined by the Architect to be unacceptable shall be corrected by personnel skilled and qualified in installing the material to be patched.
  - b. All patching shall be performed by personnel skilled in patching the substrate that has been disturbed. The subcontractor who performed the cutting shall be responsible to pay the appropriate personnel to install the patching material.
8. Cleaning: Thoroughly clean areas and spaces where work is performed or used as access to work. Remove completely paint, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering to its original condition.

**END OF SECTION**

## SECTION 01740

### CLEANING

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- 1.1.1 Work included: Throughout the construction period, maintain the buildings and site in a standard of cleanliness as described in this section.
- 1.1.2 Related work:
  - A. Documents affecting work of this section include but are not necessarily limited to General Conditions, Supplemental Conditions, and Sections in Division 1 of these Specifications.
  - B. In addition to standards described in this section, comply with requirements for cleaning as described in pertinent other sections of these Specifications.

##### 1.2 QUALITY ASSURANCE

- 1.2.1 Conduct daily inspection and more often if necessary, to verify that requirements for cleanliness are being met.
- 1.2.2 In addition to the standards described in this section, comply with pertinent requirements of governmental agencies having jurisdiction.

#### PART 2 - PRODUCTS

##### 2.1 CLEANING MATERIALS AND EQUIPMENT

- 2.1.1 Provide required personnel, equipment and materials needed to maintain the specified standard of cleanliness.

##### 2.2 COMPATIBILITY

- 2.2.1 Use only the cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material.

#### PART 3 - EXECUTION

##### 3.1 PROGRESS CLEANING

###### 3.1.1 General

- A. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage and providing required protection of materials.
- B. Do not allow accumulation of scrap, debris, waste material and other items not required for construction of this work.
- C. At least twice each month and more often if necessary, completely remove all scrap, debris and waste material from the job site. Provide adequate storage for all items waiting removal from the job site, observing requirements for fire protection and protection of the ecology.

3.1.2 Site

- A. Daily, and more often if necessary, inspect the site and pick up all scrap, debris and waste material. Remove such items to the place designated for their storage.
- B. Weekly, and more often if necessary, inspect all arrangements of materials stored on the site. Restack, tidy, or otherwise service arrangements to meet the requirements of subparagraph 3.1.1A above.
- C. Maintain the site in a neat and orderly condition at all times.

3.2 FINAL CLEANING

- 3.2.1 "Clean," for the purpose of this Article, and except as may be specifically provided otherwise, shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials.
- 3.2.2 Prior to completion of the work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in paragraph 3.1 above.
- 3.2.3 Schedule final cleaning as approved by the Architect/Engineer to enable the Owner to accept a completely clean work.

**END OF SECTION**

## SECTION 03600

### CONCRETE PILE FOUNDATION SPECIFICATIONS

1. SCOPE
  - 1.1 This Division includes the furnishing of all materials, tools, equipment, and necessary labor for the installation of the pre-stress pre-cast concrete pile foundations.
2. PREPARATION OF SITE
  - 2.1 The area within limits shown on the Drawings shall be cleared of fences, trees, logs, stumps, brush, vegetation, rubbish, and other perishable or objectionable matter to the water edge. Spoiled material shall be disposed of by the Contractor at his expense, and in a manner acceptable to the Owner.
3. PILE TYPE, CAPACITIES AND LENGTHS
  - 3.1 Type, Capacity, Length – The Contractor shall furnish 12" x 12" square pre-cast pre-stressed concrete piles (as a minimum) and proper pile size based on spacing, water velocity, and design water height.
4. DRIVING EQUIPMENTS
  - 4.1 Pile Hammer: Air-, stream-, or diesel-powered type capable of consistently delivering driving energy to pile within range recommended by hammer manufacturer for length and weight of pile and character of subsurface material anticipated.
  - 4.2 Hammer Cushions and Driving Caps: Between hammer and top of pile, provide hammer cushion and steel driving cap recommended by hammer manufacturer for type of pile.
  - 4.3 Leads: Use fixed or rigid-type pile-driver leads that will hold full length of pile firmly in position and in axial alignment with hammer. Extend leads to within two feet of elevation at which pile enters water.
5. PILE BIDDING REQUIREMENTS
  - 5.1 Bids shall be based on the following:
    - 5.1.1 A lump sum (LS) for furnishing and installing, in accordance with the Drawings and Specifications, the required total number of piling for the pier.
  - 5.2 The following formulas are presented only as guide to aid in establishing the controlling penetration per blow of at least 20 blows per foot which, together with the minimum depth of penetration given on the plans, will serve to determine the required depth of penetration of each individual pile:  $R = 2E$  for double acting hammers;  $S = 0.1 P/WR = 2WH$  for single-acting hammers  $S = 0.1 P/W$  in which R is the approximate allowable pile load in pounds, E equals the energy in foot-pounds per blow based on an acceptable certified statement from the manufacturer of the hammer; W equals the weight of the hammer or ram in pounds; H equals the fall of the hammer or ram in feet; P is the weight of the pile in pounds and when P is less than W, P/W shall be taken at unity; and S equals the average inches of penetration per blow for the last three blows. An allowance shall be made for reduced penetration caused by shock absorption of pile caps and by material penetrated which will be removed after the pile is driven. Water jets may not be used in driving.

## 6. PILE DRIVING

- 6.1 Pile shall be accurately located and driven by such methods and equipment as to not impair their strength, to retain final driving resistance, and develop lateral support of the soil. Driving equipment shall give adequate support to hold piles in correct position during driving. Driving shall be done with fixed leads which will hold pile firmly in position and axial alignment with the hammer. Suitable driving heads shall be used to prevent damage to pile butts. Piles shall be driven with an approved steam, air, or diesel hammer. The value of E shall be not less than 19,000 foot pounds and not more than 200,000 foot pounds for 12-inch square to 24-inch square piling.
- 6.2 Piles shall be driven to the depth shown on the plans or practical refusal in the strata found starting at the depth indicated in the soils report. As driving through the overlying layers progresses, these layers, due to vibration, may increase in density and thus harder driving could occur.
- 6.3 Pile-Driving Records: The Contractor shall maintain accurate driving records for each pile and attested to by the owner's representative, qualified professional engineer or qualified testing lab and shall include the following data:
1. Project name and number
  2. Name of Contractor
  3. Pile location in pile group and designation of pile group
  4. Sequence of driving in pile group
  5. Pile dimensions
  6. Ground elevation
  7. Elevation of tips after driving
  8. Final tip and cut off elevations of piles after driving pile group
  9. Records of re-driving
  10. Elevation of splices
  11. Type, make, model, and rated energy of hammer
  12. Weight and stroke of hammer
  13. Type of pile-driving cap used
  14. Cushion material and thickness
  15. Actual stroke and blow rate of hammer
  16. Pile-driving start and finish times, and total driving time
  17. Time, Pile-tip elevation, and reason for interruptions
  18. Number of blows for each one foot of penetration, and number of blows per 1 inch for the last 6 inches of driving
  19. Pile deviations from location and plumb
  20. Preboring or special procedures used
  21. Unusual occurrences during pile driving

The owner may require testing and certification by an independent testing lab at the Contractor's expense if necessary to ensure compliance.

## 7. OBSTRUCTIONS

- 7.1 Should obstructions be encountered which will prevent the pile from securing adequate penetration, threaten pile damage, or cause the pile to drift from required location, driving shall cease, Contractor shall contact the Owner for instructions as to proper procedures.

## 8. DAMAGED PILES

- 8.1 Each pile shall be free from defects and damage due to construction and installation.
- 8.2 Damaged piles shall be considered but not limited to misalignment, tip drift, bent or broken piles, buckling, and concrete strength below specified strength.
- 8.3 Should any pile be damaged during installation, too short to develop required resistance, or otherwise not conforming to this Specification, this pile shall be withdrawn, and another driven in its place. If it is impossible to withdraw damaged or rejected pile, another pile shall be installed as near as practical to it. A reduced pile capacity allowed will be the Engineer's decision
- 8.4 Each pile and pile cap that has been damaged by driving or subsequently placed piles and caps shall be corrected to satisfaction of Engineer and at no extra cost to Owner.

## 9. ALLOWABLE VARIATION IN DRIVING

- 9.1 Piles shall be driven with a variation of not more than 2% out of plumb, with a maximum variation of the head of the pile from the position shown on the Drawings of not more than 3 inches. Piles not within the maximum tolerances stated above shall be withdrawn and re-driven within such tolerances or replaced by an additional pile without additional compensation. Manipulation of piles considered by the Engineer to be excessive will not be permitted, and the Contractor will be required to re-drive the pile or use other satisfactory corrective methods to avoid such manipulation. Broken or shattered piles shall not be accepted.

## 10. CONCRETE AND REINFORCEMENT

### 11.

- 11.1 Concrete piles shall be made to conform to both materials and workmanship of the joint "Standard for Prestressed Concrete Piles" by the American Association of State Highway Officials and the Prestressed Concrete Institute.
- 11.2 All Reinforcing Steel shall be deformed billet steel, conforming to ASTM A615, Grade 60. The Contractor shall furnish all necessary support bars, tie bars, etc., required for properly supporting and spacing the bars in the forms. The reinforcement will be subject to field inspection for rust, shape and dimensions. If project is located in a salt-water environment, all reinforcing steel shall be epoxy coated

## 12. PILE CAPS

- 12.1 Pile caps are to be on all piles and shall be polyethylene, 1/8" minimum thickness.



## SECTION 05800

### ALUMINUM FLOATING DOCKS AND ACCESSORIES

#### PART 1 - GENERAL

##### 1.01 DESCRIPTION

The work covered under this section shall consist of the manufacturing and/or supplying of aluminum floating docks, pile guides, cleats, fendering, anchorage systems and other marine hardware and accessories as may be shown on the plans. The manufacturer shall provide final shop drawings to the Owner for approval.

Approved manufacturers of aluminum floating docks are listed in Part 4 of this document.

##### 1.02 STANDARDS AND SPECIFICATIONS

The manufacturer may be required to submit a list of previous experience on similar projects. If required by the Owner. The previous experience record will be submitted to the Owner or his designated representative within 24 hours after the bid time.

The installing contractor shall be a qualified **Marine Contractor** licensed by the State of South Carolina.

The deck and frame structural components of floating docks shall be designed with minimum safety factors on working stress which conform to those set forth in the latest issue of the Aluminum Association's "**Specifications for Aluminum Structures**" for buildings and similar type structures.

All aluminum floating docks, pile guides, cleats, fendering, anchorage systems and other marine hardware and accessories must meet the requirements set forth in the "**Manual of Design Guidelines for Boating Access Sites**" prepared for the South Carolina Department of Natural Resources by Pace Engineering Consultants, Inc. Copies of this document can be obtained, by request, from the SCDNR, Engineering Section (address below).

All floating docks must receive approval for use by the Owner no later than 2 weeks prior to the scheduled Bid Date to be included in the Bid Documents. Dock manufacturers may submit a request for approval to:

SCDNR, Engineering Section  
1000 Assembly St., Room 252  
Columbia, SC 29201

Submittals shall include the following as a minimum and shall be submitted in accordance with paragraph 3.3 of the Instructions to Bidders (AIA Document A701).

- A. Dimensional layout of docks and piles, or other anchorage system to be furnished under this contract.
- B. Engineering calculations showing compliance with the design criteria specified within the aforementioned Specifications and Guidelines. All calculations will be stamped with the seal of a qualified licensed, professional engineer licensed by the State of South Carolina.
  1. Compliance with combined live and dead load requirements considering both bending and deflection.
  2. Compliance with freeboard requirements under normal load conditions.

C. Typical sections or details of the following:

1. Floating docks, including flotation.
2. Anchorage system.
3. Cleats.
4. Fendering.

## **PART 2 - MATERIALS**

### **2.01 DESCRIPTION**

The following requirements are a minimum and must be met by each dock fabricator in accordance with the requirements of aforementioned section entitled "GENERAL".

### **2.02 STRUCTURAL ALUMINIUM**

All structural aluminum alloy shapes to be 6061-T6. Metal for docks to be 6061-T6 aluminum alloy. 6061-T6 shall be extruded in accordance with the requirements of applicable of sections of Federal Specifications QQ-A-200. Mill certification is required on all Aluminum alloys.

### **2.03 MOORING CLEATS**

Cleats shall be made of Stainless Steel and be bolted onto the aluminum dock.

### **2.04 CONNECTORS**

Stainless steel bolts, nuts, washers and screws shall be type 18-8 (300 Series).

### **2.05 FLOATATION**

All flotation shall consist of corrugated aluminum pontoons, unless otherwise noted on plans or approved by Owner or Owner's authorized representative. Corrugated aluminum pontoons shall be filled with closed cell polyurethane with 2 pounds PCF density (no loose beads accepted).

### **2.06 DOCK FENDERING**

Wood dock fendering shall be (2) 3"x8" around outside perimeter of docks where shown on the drawings, unless otherwise noted on plans or approved by Owner or Owner's authorized representative. Fendering shall be Southern Pine No. 1 Stress Grade with a minimum CCA (Copper Chromium Arsenate) or ACQ (Alkaline Copper Quat) content equal to 0.6 pounds per cubic foot – moisture content not to exceed 19 percent after treatment. All wood shall comply with American Softwood Lumber Standards PS-2070. Each piece of lumber shall be identified by the grade and treatment mark of a recognized organization or independent agency certified by the American Lumber Standards Committee, Washington, DC to grade the species. All lumber specified for treatment shall be treated to the requirements of American Wood Preservers Association AWWA UC4B. Certification of treatment and grade of lumber must be provided to the Owner.

## **PART 3 – EXECUTION**

### **3.01 DESIGN REQUIREMENTS - ACCESSORIES**

#### *3.01.01 Decking*

The decking shall be designed to withstand a live load of 50 pounds per square foot. Allowable deflection shall be  $L/180$  where "L" is the free span between cross members in inches.

#### *3.01.02 Mooring Cleats*

Cleats shall be designed to withstand a mooring line load of 1500 pounds in any direction.

#### *3.01.03 Anchors*

Anchoring devices for floating docks shall allow free movement of the dock, while minimizing damage due to normal dock movement caused by tides, boat wakes, water fluctuation and seasonal winds. Anchoring devices shall be of sufficient number to restrain a uniform lateral force of 150 pounds per linear foot applied along the entire length of the dock.

### **3.02 DESIGN REQUIREMENTS - FLOATATION**

For normal installations, aluminum floating docks shall be designed to withstand a minimum Uniform Live Load of 20 pounds per square foot applied vertically. For high use installations such as "Event Docks", the minimum Uniform Live Load may be up to 60 pounds per square foot applied vertically as specified on the plans.

The flotation shall be sized to provide a Minimum Freeboard of 9 inches under Dead Load plus Uniform Live Load, plus a Point Load of 450 pounds applied at any location on the dock's walking surface, and shall provide a Minimum Freeboard of 15 inches (18 inches in salt water) freeboard under Dead Load plus Uniform Live Load only. Maximum allowable freeboard under Dead Load only is 24".

### **3.03 FABRICATION REQUIREMENTS - ACCESSORIES**

Any potentially corrosive installation of dissimilar material shall be properly insulated to minimize corrosion in a marine environment.

#### *3.03.01 Decking*

Decking shall be extruded 11.62" ribbed aluminum slats with ribs at a minimum of 3 inches on center to provide a non-skid surface and shall not exceed 12 inches in width with not more than 3/8-inch air space between the slats. The legs of each decking slat shall be welded to the side members and to any longitudinal members with a minimum of 1-1/4 inches of weld per leg. The decking slats shall be placed transversely on the dock

#### *3.03.02 Mooring Cleats*

Boat cleats on aluminum-decked docks shall be bolted on with stainless steel bolts, nuts and washers. All cleats shall be installed every 8 feet or in locations as shown on plans.

#### *3.03.03 Anchors*

Anchoring devices, including pile guides, shall be bolted or welded to the piers and docks in locations and according to the details shown in the plans.

### 3.04 FABRICATION REQUIREMENTS – STRUCTURES

Cleats and other accessories shall be welded or bolted as shown in the plans. Wood fendering shall be installed in the shop. Flotation may be shipped detached for easier unloading and shipping.

### 3.05 CONSTRUCTION REQUIREMENTS – STRUCTURES

Aluminum decked floating docks shall be anchored with metal pile guides or other anchoring devices bolted to the dock frame. Floating docks must move freely during the entire cycle of water level extremes with normal expected wind condition.

## **PART 4 – APPROVED DOCK MANUFACTURERS**

The Owner has approved the following dock manufacturers for use:

1. Gator Dock and Marine  
2880 Mellonville Ave.  
Sanford, FL 32773  
(407) 323-0190
2. Dock Hardware & Marine Fabrication  
4701 Adrian Highway  
Conway, SC 29526  
(843) 365-567
3. Crescent Marine Access  
2112 Johnson Road NE  
Crescent, GA 31304  
(912) 832-4425
4. Ravens Marine, Inc.  
3295 Orange Ave.  
Kissimmee, FL 34744  
(407) 935-9799

END OF SECTION

## SECTION 05900

### ALUMINUM FIXED PIERS AND ACCESSORIES

#### PART 1 - GENERAL

##### 1.01 DESCRIPTION

The work covered under this section shall consist of manufacturing and/or supplying of the prefabricated fixed piers, anchorage to piles and other hardware and accessories as may be shown or enumerated on the plans. All materials used shall be provided or manufactured by approved dock vendors/suppliers. (See Part 4 - Approved Pier Manufacturers) Shop drawings shall be submitted to the Owner for approval prior to fabrication detailing all manufactured components, hardware and connections.

##### 1.02 STANDARDS AND SPECIFICATIONS

The deck and frame structural components of fixed piers shall be designed with minimum safety factors on working stress which conform to those set forth in the latest issues of the Aluminum Association "SPECIFICATIONS FOR ALUMINUM STRUCTURES" for building and similar type structures shall. The installing contractor shall be a qualified Marine Contractor or General Contractor licensed by the State of South Carolina. The manufacturer/supplier shall have a minimum of 5 years continuous experience in commercial pier and dock fabrication and may be required to submit a list of previous experience on similar projects. If required by the Owner, the previous experience record will be submitted to the Owner or his designated representative within 24 hours after the bid time. Requests for approval to use a manufacturer/supplier other than Gator Dock and Marine shall include the following as a minimum and shall be submitted in accordance with paragraph 3.3 of the Instructions to Bidders (AIA Document A701).

- A. Dimensional plan view of piers.
- B. Typical sections or details through piers to include main framing, decking and guardrails.

#### PART 2 - MATERIALS

##### 2.01 DESCRIPTION

The following requirements are a minimum and must be met by each dock fabricator in accordance with the requirements of aforementioned section entitled "GENERAL". Alternate approval must be in writing from the South Carolina Department of Natural Resources, Engineering Section.

Aluminum used for structural purposes in buildings and structures shall comply with AA ASM 35 and Parts 1-A of the "ALUMINUM DESIGN MANUAL." The nominal loads shall be the minimum design loads required by Chapter 16 of the "2015 International Building Code."

## 2.02 STRUCTURAL ALUMINIUM

All metal for docks to be 6061-T6 aluminum alloy. 6061-T6 shall be extruded in accordance with the requirements of applicable sections of Federal Specifications QQ-A-200. Mill certification is required to be submitted to DNR on all Aluminum alloys.

## 2.03 CONNECTORS

All bolts, nuts, washers and screws shall be stainless steel.

## 2.04 RAIL BOARDS

Wooden rail boards shall be as shown in the details within the drawings, unless otherwise noted on plans or approved by Owner or Owner's authorized representative. Rail boards and bait shelves shall be Southern Pine No. 1 Dense Grade with a minimum CCA (Copper Chromium Arsenate) or ACQ (Alkaline Copper Quat) treatment of 0.60 pounds per cubic foot (or) equivalent – moisture content not to exceed 19 percent after treatment. All wood shall comply with American Softwood Lumber Standards PS-2070. Each piece of lumber shall be identified by the grade and treatment mark of a recognized organization or independent agency certified by the American Lumber Standards Committee, Washington, DC to grade the species. All lumber specified for treatment shall be treated to the requirements of American Wood Preservers Bureau AWPB LP-22. Certification of treatment and grade of lumber must be provided to the Owner.

## PART 3 – EXECUTION

### 3.01 DESIGN REQUIREMENTS - ACCESSORIES

Engineering calculations showing compliance with the design criteria specified herein. All calculations will be stamped with the seal of a qualified licensed, professional engineer licensed by the State of South Carolina.

#### *3.01.01 Decking*

The extruded ribbed decking shall be a minimum 11" wide and be designed to withstand a combined dead load and live load of 50 pounds per square foot per individual slat. Allowable deflection shall be L/180 where "L" is the free span between cross members in inches.

#### *3.01.02 Guardrails*

Guardrails shall be 32" in height for designated "handicapped fishing access areas" areas and 42" in height for all other areas as indicated on plans. These heights shall be measured in inches above the finished walking surface. Guardrails shall be designed in accordance with paragraph 1607.1.1 of the "2018 INTERNATIONAL BUILDING CODES."

Open guards on the fixed pier shall have balusters or ornamental patterns such that a 4 inch diameter sphere cannot pass through any opening up to a height of 34 inches. From a height of 34 inches to 42 inches above the adjacent walking surfaces, a sphere 8 inches in diameter shall not pass.

### 3.02 DESIGN REQUIREMENTS - STRUCTURES

Fixed pier structures shall be designed to withstand a minimum live load of 50 pounds per square foot applied vertically and an uplift force of 75 percent of the combined dead load and live load. Allowable deflections shall be a maximum of  $L/180$  where "L" is the distance between span supports in inches. The pier structures shall be designed to withstand a minimum lateral load imposed by the moving water with the pier fully submerged. The minimum water velocity for design shall be 8 ft/sec.

### 3.03 FABRICATION REQUIREMENTS - ACCESSORIES

Any potentially corrosive installation of dissimilar material shall be properly insulated to minimize corrosion in a marine environment.

#### 3.03.01 Decking

Decking shall be extruded ribbed aluminum slats with a light knurl perpendicular to serrations to provide a non-skid surface and shall not exceed 12 inches in width with not less than 1/8 inch nor more than 3/8 inch air space between the slats. The legs of each decking slat shall be welded to the side members and to any longitudinals with a minimum of 1-1/4 inches of weld per leg. The decking slats shall be placed transversely on the pier.

#### 3.03.02 Guardrails

Guardrails shall be installed in locations shown in the plans. Guardrails shall be secured in place for alignment using steel bolts through the guardrail post attached to the pier side rails. The type of guardrail system shall be the type indicated on the plans.

### 3.04 FABRICATION REQUIREMENTS – STRUCTURES

Fixed pier units shall be sequentially numbered, match drilled and bolted in the shop prior to shipment. All joints are to be "MIG" welded.

### 3.05 CONSTRUCTION REQUIREMENTS – STRUCTURES

Fixed pier structures shall be anchored to the piles as shown and detailed within the drawings.

## **PART 4 – APPROVED PIER MANUFACTURERS**

- 1) Gator Dock and Marine  
2880 S. Mellonville Ave.  
Sanford, FL 32773  
(407) 323-0190
- 2) Dock Hardware & Marine Fabrication  
2401 N. Main Street  
Conway, SC 29526  
(843) 365-5567
- 3) Crescent Marine Access  
2112 Johnson Road NE  
Crescent, GA 31304  
(912) 832-4425

- 4) Ravens Marine, Inc.  
3295 Orange Ave.  
Kissimmee, FL 34744  
(407) 935-9799

Information shown above is subject to change.

**END OF SECTION**



**SECTION 070000****CONSTRUCTION IN NAVIGABLE WATERS PERMIT****PART 1 - GENERAL**

## 1.01 DESCRIPTION

This section is to provide the contractor with permitting requirements and/or any special conditions that relate to the construction activities for this particular project. The contractor shall abide by these conditions or special conditions as they relate to construction in the navigable waters of the State of South Carolina. The owner will obtain and furnish copies of any permits related to this project as well as any permit placards that need to be displayed on site. The contractor shall obtain all other grading permits or business licenses required for such construction activity.

**PART 2 – FEDERAL PERMIT**

## 2.01 CORPS OF ENGINEERS

This permit is for the construction of this project as issued by the U.S. Army Corps of Engineers. The contractor shall abide by the general conditions and / or any special conditions within this permit as they relate to the construction activities of this work. The contractor will be held accountable and liable for any violations or fines in reference to these requirements.

SEE ATTACHED

**PART 3 – STATE PERMIT**

## 3.01 DHEC / OCRM

This permit is for the construction of this project as issued by the South Carolina Department of Health and Environmental Control and/or the Office of Ocean and Coastal Resource Management. The contractor shall abide by the general conditions and / or any special conditions within this permit as they relate to the construction activities of this work. The contractor shall stay in compliance with the 401 Certification requirements of this permit and will be held accountable and liable for any violations or fines in reference to these requirements.

SEE ATTACHED

No work can commence or continue without compliance of the conditions of the permits.

END OF SECTION



DEPARTMENT OF THE ARMY  
CHARLESTON DISTRICT, CORPS OF ENGINEERS  
69A HAGOOD AVENUE  
CHARLESTON, SOUTH CAROLINA  
29403-5107

FEB 12 2018

Regulatory Division

Mr. John Stieglitz  
Colleton County Capital Projects and Purchasing Director  
113 Mable T. Willis Blvd.  
Walterboro, South Carolina 29488

Dear Mr. Stieglitz:

This letter is in response to a Pre-Construction Notification (PCN) (SAC-2017-01816) which we received on November 15, 2017, and was considered complete on January 23, 2018. By submittal of the PCN, you requested verification that the proposed project is authorized by a Department of the Army (DA) Nationwide Permit (NWP).

The PCN contains the following identifying information for this project. The work affecting waters of the United States is part of an overall project known as "Old Chehaw Public Boat Landing." The activities in waters of the United States include removing the existing 6' x 88' wooden dock and piles, and replacing them with a 6' x 20' aluminum ramp attached to a new 6' x 70' fixed aluminum pier and 12" concrete support piles. In addition the existing floating dock will be reinstalled with a 4' x 32' aluminum gangway. The project is located in waters of Old Chehaw River, at the existing Old Chehaw Public Boat Landing, adjacent to State Road S-15-161, Green Pond, Colleton County, South Carolina (Latitude: 32.6343 °N, Longitude: -80.5873 °W). The PCN also includes the following supplemental information:

- a. Drawing sheets 1-4 of 4 titled "Old Chehaw Landing Fixed Dock Replacement" with sheet 1 of 4 dated November 7, 2017 and sheets 2-4 of 4 revised February 1, 2018;

Based on a review of the PCN, including the supplemental information indicated above, it has been determined that the proposed activity will result in minimal individual and cumulative adverse environmental effects and is not contrary to the public interest. Furthermore, the activity meets the terms and conditions of NWP 3 Maintenance.

For this authorization to remain valid, the project must comply with the enclosed NWP General Conditions, Charleston District Regional Conditions, and the following special conditions:

- a. That impacts to aquatic areas do not exceed those specified in the above mentioned PCN, including any supplemental information or revised permit drawings that were submitted to the Corps by the permittee;
- b. That the construction, use, and maintenance of the authorized activity is in accordance with the information given in the PCN, including the supplemental information listed above, and is subject to any conditions or restrictions imposed by this letter;

- c. That the permittee shall submit the attached signed compliance certification to the Corps within 30 days following completion of the authorized work;
- d. The permittee shall instruct all personnel associated with the project of the potential presence of and the need to avoid collisions with protected species, which may include but is not limited to West Indian manatees, Atlantic sturgeon, Shortnose sturgeon, sea turtles, blue whale, fin whale, humpback whale, North Atlantic right whale, sei whale and sperm whale;
- e. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing protected species which are protected under the Marine Mammal Protection Act of 1972 and/or the Endangered Species Act of 1973;
- f. Any siltation barriers used during the project shall be made of material in which protected species cannot become entangled and must be properly secured, and regularly monitored to avoid protected species entrapment;
- g. All vessels associated with the project shall operate at wake/idle speeds at all times while in the construction area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible;
- h. If protected species are seen within 100 yards of the active construction area all appropriate precautions shall be implemented to ensure protection of the protected species. These precautions shall include the operation of all moving equipment no closer than 50 feet to a protected species. Operation of any equipment closer than 50 feet to a protected species shall necessitate immediate shutdown of that equipment. Activities will not resume until the protected species has departed the project area of its own volition;
- i. Incidents where any individuals of sea turtles, Atlantic sturgeon, Shortnose sturgeon, blue whale, fin whale, humpback whale, North Atlantic right whale, sei whale and sperm whale listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the United States or structures or work in navigable waters of the United States authorized by this DA permit shall be reported to NOAA Fisheries, Office of Protected Species at (727) 824-5312, the SCDNR Hotline at 1-800-922-5431, and the Regulatory Office of the Charleston District of the U.S. Army Corps of Engineers at (843) 329-8044. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure, or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved;

- j. In order to ensure protection and reduce potential construction-related impacts to West Indian manatees that may enter the project area during dredging activities performed outside the winter months (November thru April), to discountable and insignificant levels, the permittee will comply with the following;**
- k. All construction personnel must monitor water-related activities for the presence of manatee(s) during May - October and;**
- l. Any collision with and/or injury to a manatee shall be reported immediately to Mr. Jim Valade of the U.S. Fish and Wildlife Service, North Florida Field Office, at (904) 731-3116, and the SCDNR Hotline at 1-800-922-5431;**
- m. The permittee understands and agrees that pilings will be installed using a water jet or vibratory hammer. In the event standard pile driving (impact hammer) is utilized, the permittee understands and agrees that a soft-strike procedure (three strikes at 40%-60% energy level once a minute for 3 minutes) must be conducted prior to beginning pile driving activities and after any pile driving interruptions of more than 30 minutes;**
- n. That the permittee understands and agrees that pile driving activities must be limited to 12 hours per day with a 12-hour rest period between pile driving activities;**
- o. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration;**
- p. Use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the U.S.;**
- q. The permittee must install and maintain, at their expense, any safety lights and signals prescribed by the U.S. Coast Guard (USCG), through regulations or otherwise, on authorized facilities. The USCG may be reached at the following address and telephone number: (as of February 2013) U. S. Coast Guard District Seven, Waterways Management Branch, 909 SE 1st Ave, Suite 406, Miami, FL. 33131, and 305-415-6755 or 305-415-6750;**

This verification is valid until March 18, 2022, unless the district engineer modifies, suspends, or revokes the NWP authorization in accordance with 33 CFR 330.5(d). If prior to this date, the NWP authorization is reissued without modification or the activity complies with any subsequent modification of the NWP authorization, the verification continues to remain valid until March 18, 2022. If you commence, or are under contract to commence, this activity before the NWP expires, or the NWP is modified, suspended, or revoked by the Chief of Engineers or

division engineer in accordance with 33 CFR 330.5(b) or (c), respectively, so that the activity would no longer comply with the terms and conditions of the NWP, you will have 12 months after the date the NWP expires or is modified, suspended, or revoked, to complete the activity under the present terms and conditions of this NWP.

This NWP is being verified based on the information you have provided. It is your responsibility to read the attached NWP(s) along with the General, Regional, and Special Conditions before you begin work. If you determine that your project will not be able to meet the NWP and the conditions, you must contact the Corps before you proceed.

In all future correspondence concerning this matter, please refer to our file number SAC-2017-01816. A copy of this letter is being forwarded to certain State and/or Federal agencies for their information. If you have any questions concerning this matter, please contact Delmetria Taylor, at 843-329-8055.

Sincerely,

  
Mary Hope Green  
Watershed Manager

Enclosures:

Permit Drawings  
Nationwide Permit General Conditions  
Nationwide Permit Regional Conditions  
Compliance Certification Form  
NWP 3 Enclosure

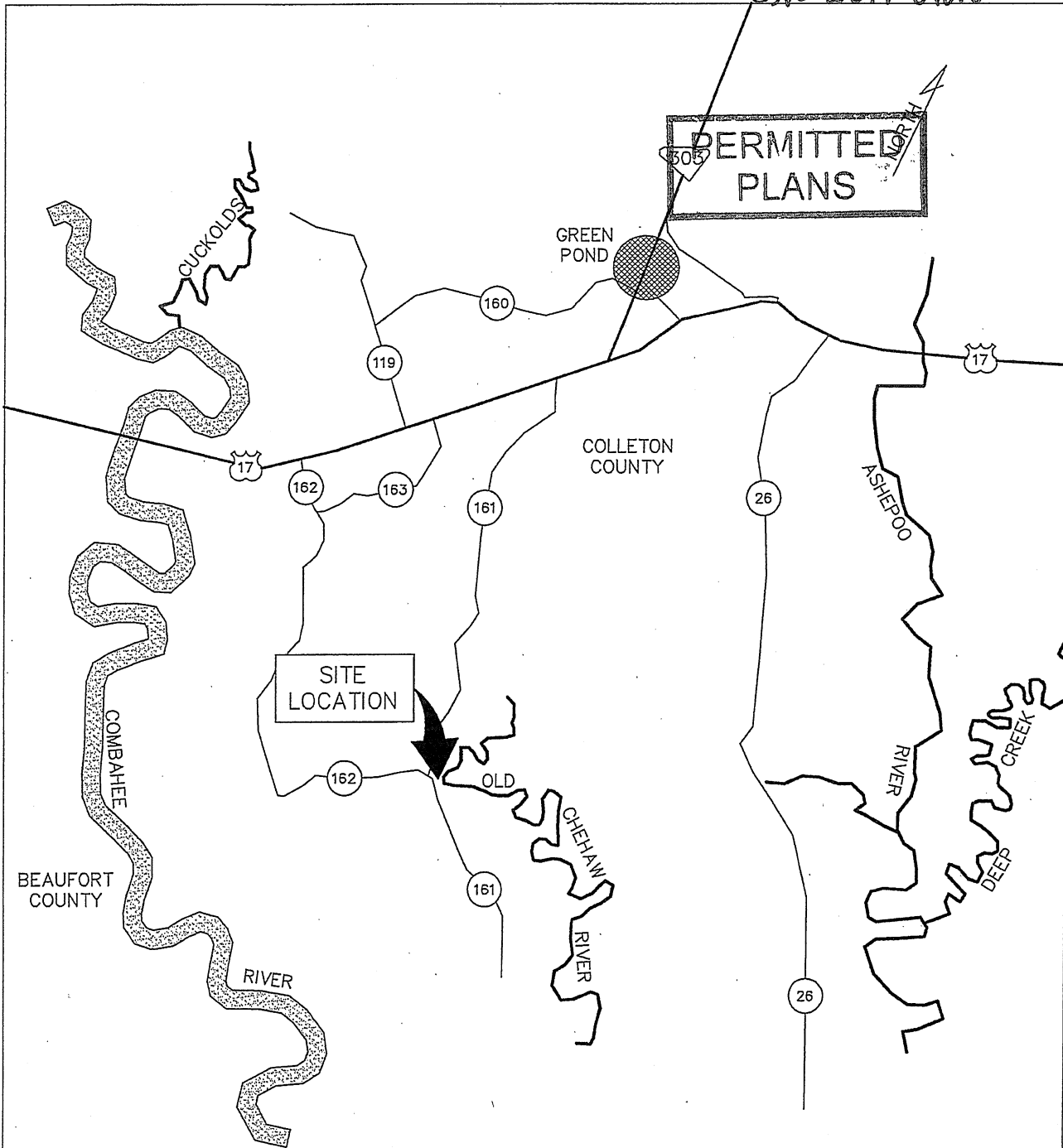
Copies Furnished:

Mr. Tim Vinson  
SC Department of Natural Resources  
1000 Assembly Street  
Columbia, South Carolina 29202

South Carolina Department of  
Health and Environmental Control  
Bureau of Water  
2600 Bull Street  
Columbia, South Carolina 29201

SCOCRM  
1362 McMillan Avenue, Suite 400  
Charleston, South Carolina 29405

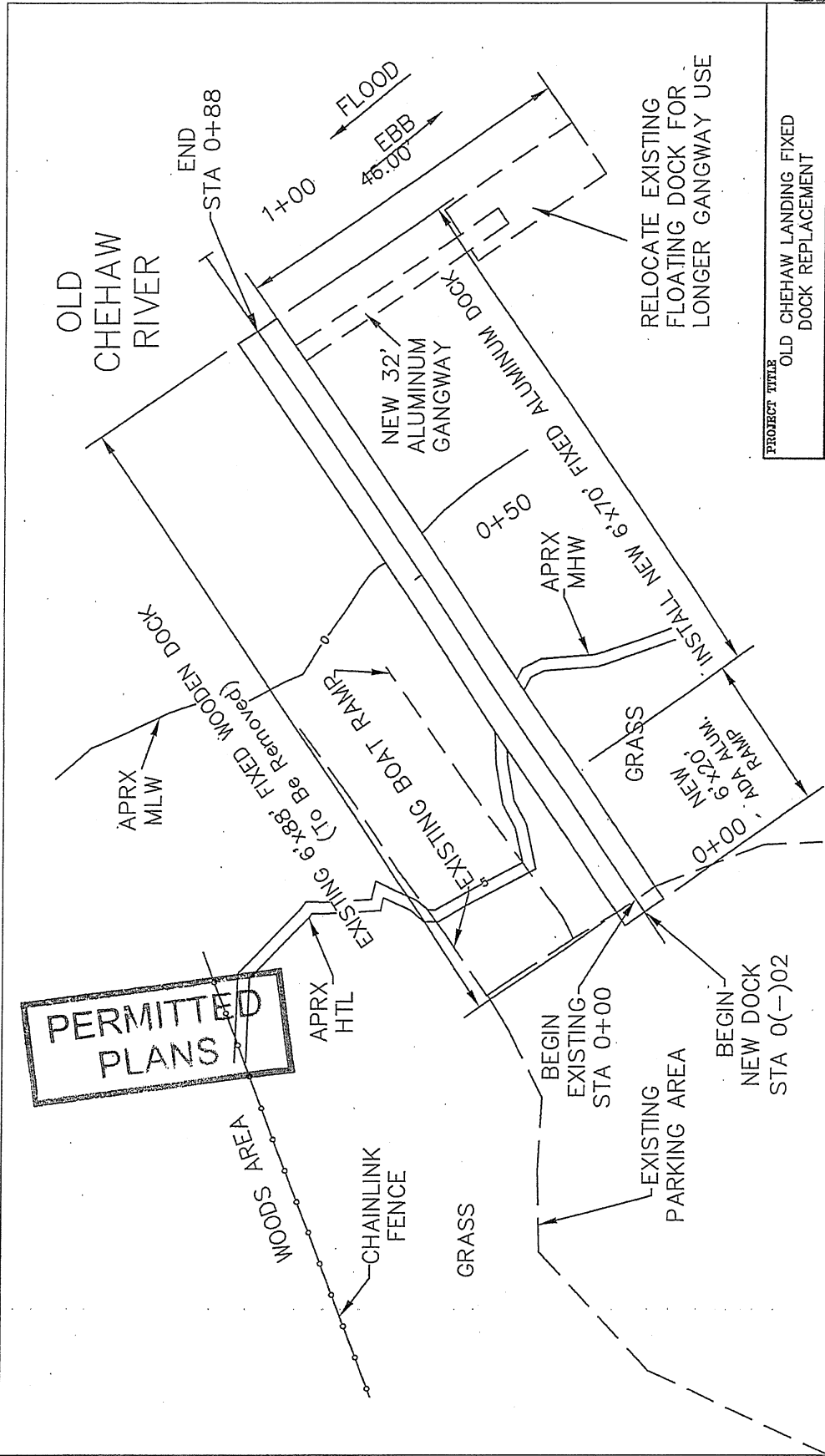
SAC-2017-01816



<b>PROJECT TITLE</b>		OLD CHEHAW LANDING FIXED DOCK REPLACEMENT	
<b>PROJECT LOCATION</b>		APPROXIMATELY 7 MILES SOUTH OF GREEN POND, OFF OF STATE ROAD S-15-162, ON THE OLD CHEHAW RIVER IN COLLETON COUNTY	
<b>APPLICANT</b>		COLLETON COUNTY	
<b>AUTHORIZED AGENT</b>		TIM VINSON - SCDNR	
<b>DRAWING SCALE</b>	NONE	<b>DATE</b>	11-7-17
<b>APPLICATION #</b>		<b>SHEET</b>	1 of 4

REVISION	DATE

SAC-2017-01816



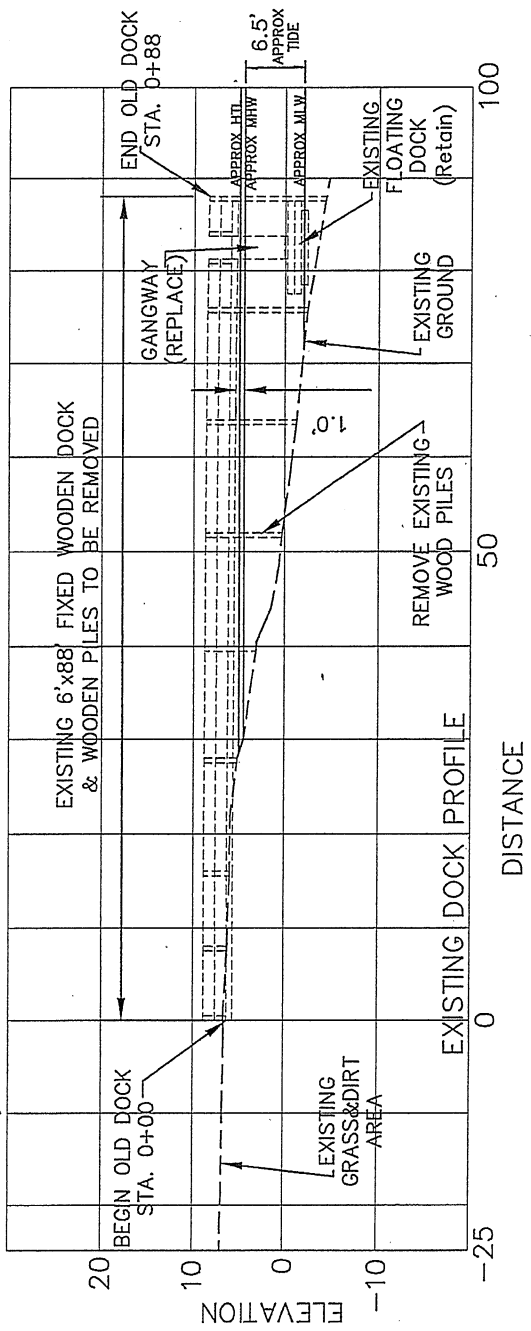
**PERMITTED PLANS**

THE EXISTING FIXED WOODEN DOCK SYSTEM WILL BE REMOVED TO ALLOW THE INSTALLATION OF THE NEW FIXED ALUMINUM DOCK SYSTEM. THE EXISTING FLOATING DOCK WILL BE RETAINED BUT MOVED OVER 11FT TO ALLOW FOR PROPER OPERATION OF THE LONGER ALUMINUM GANGWAY WITH THE RAISING OF THE FIXED DOCK. PILINGS FOR THE FLOATING DOCK WILL BE REPLACED WITH CONCRETE PILES. SHADE AREA WILL NOT CHANGE. PILINGS TO BE INSTALLED WITH A VIBRATORY HAMMER OR USE OF STANDARD PILE DRIVER WITH A SOFT TAP STARTING PROCEDURE.

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<b>APPLICANT</b>	COLLETON COUNTY
<b>AUTHORIZED AGENT</b>	TIM VINSON - SCDNR
<b>DRAWING SCALE</b>	1"=20'
<b>DATE</b>	11-7-17
<b>APPLICATION #</b>	SHEET 2 of 4

REVISION	DATE
REVISED	2-1-18

SAC-2017-01816



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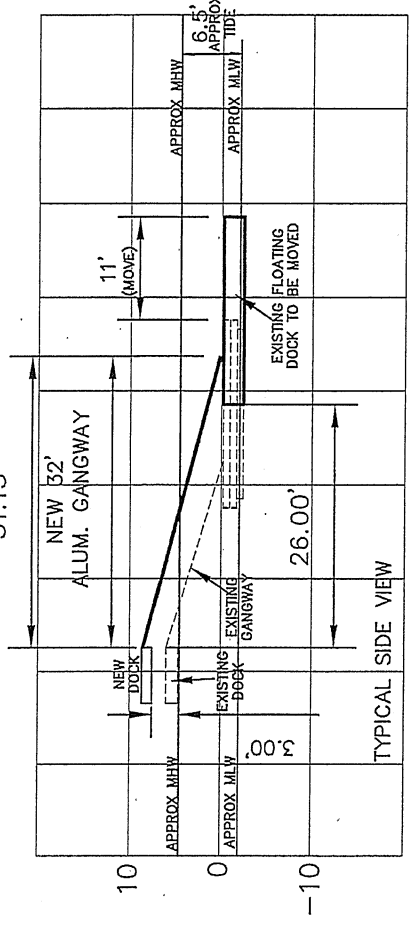
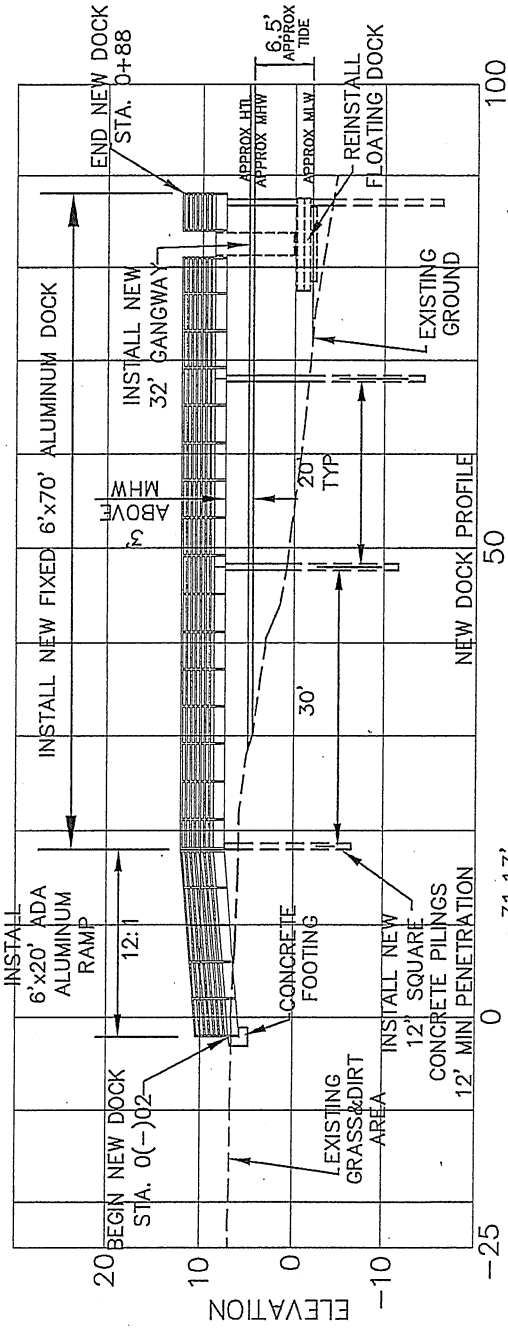
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REVISION	DATE
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DRAWING SCALE	1"=20'
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SHEET	3 of 4



SAC-2017-01816

PERMITTED  
PLANS



THE EXISTING FIXED WOODEN DOCK SYSTEM WILL BE REMOVED TO ALLOW THE INSTALLATION OF THE NEW FIXED ALUMINUM DOCK SYSTEM. THE EXISTING FLOATING DOCK WILL BE RETAINED BUT MOVED OVER 11FT TO ALLOW FOR PROPER OPERATION OF THE LONGER ALUMINUM GANGWAY WITH THE RAISING OF THE FIXED DOCK. PILING FOR THE FLOATING DOCK WILL BE REPLACED WITH CONCRETE PILES. SHADE AREA WILL NOT CHANGE. PILING TO BE INSTALLED WITH A VIBRATORY HAMMER OR USE OF STANDARD PILE DRIVER WITH A SOFT TAP STARTING PROCEDURE.

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<b>DATE</b>	11-7-17
<b>APPLICATION #</b>	4 of 4

<b>REVISION</b>	<b>DATE</b>
REVISED	2-1-18



36. Individually list wetland impacts including mechanized clearing, fill, excavation, flooding, draining, shading, etc. and attach a site map with location of each impact (attach additional sheets if needed).

Impact No.	Wetland Type	Distance to Receiving Water body (LF)	Purpose of Impact (road crossing, impoundment, flooding, etc)	Impact Size (acres)
	NONE			
Total Wetland Impacts (acres)				

37. Individually list all seasonal and perennial stream impacts and attach a site map with location of each impact (attach additional sheets )

Impact No.	Seasonal or Perennial Flow	Average Stream Width (LF)	Impact Type (road crossing, impoundment, flooding, etc)	Impact Length (LF)
	NONE			
Total Stream Impacts (Linear Feet)				

38. Have you commenced work on the project site?  YES  NO If yes, describe all work that has occurred and provide dates.

39. Describe measures taken to avoid and minimize impacts to Waters of the United States:

The new fixed aluminum dock will be installed within the same footprint as the old with new concrete piles. Retaining the existing aluminum gangway and aluminum floating courtesy dock, replace wood piles securing the floating dock with concrete piles.

40. Provide a brief description of the proposed mitigation plan to compensate for impacts to aquatic resources or provide justification as to why mitigation should not be required (Attach a copy of the proposed mitigation plan for review).

this public access site is already established and open for public use. All structures will be in same footprint.

41. See the attached sheet to list the names and addresses of adjacent property owners.

42. List all Corps Permit Authorizations and other Federal, State, or Local Certifications, Approvals, Denials received for work described in this application.

NONE

43. Authorization of Agent. I hereby authorize the agent whose name is given on page one of this application to act in my behalf in the processing of this application and to furnish supplemental information in support of this application.

*[Signature]*  
Applicant's Signature

12-4-17  
Date

44. Certification. Application is hereby made for a permit or permits to authorize the work and uses of the work as described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent for the applicant.<sup>1</sup>

Applicant's Signature

Date

*[Signature]*  
Agent's Signature

12/14/17  
Date

<sup>1</sup>The application must be signed by the person who desires to undertake the proposed activity or it may be signed by a duly authorized agent if the authorization statement in blocks 11 and 43 have been completed and signed. 18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.



**SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT**

**CRITICAL AREA PERMIT & COASTAL ZONE CONSISTENCY CERTIFICATION**

**Permittee(s):** Colleton County

**Permit Number(s):** OCRM02243

**Date of Issuance:** June 5, 2020

**Expiration Date:** June 5, 2025

**Location:** On and adjacent to Old Cheehaw River at 6619 Wiggins Road, Green Pond  
Colleton County, South Carolina (TMS#: INSERT TMS TAG)

**SEE SPECIAL  
CONDITIONS**

This permit is issued under the provisions of S. C. Code Ann. Section 48-39-10, et seq., and 23A S.C. Code Ann. Regs. 30-1 through 30-18, *as amended*. **Please carefully read the project description and special conditions that appear on this permit/certification as they will affect the work that is allowed and may modify the work from that shown on the submitted plans. All special conditions attached to the permit will take precedent over submitted plans.** The general conditions are also a part of this permit/certification and should be read in their entirety. The S. C. Contractor's Licensing Act of 1999, enacted as S.C. Code Ann. Section 40-11-5 through 430, requires that all construction with a total cost of \$5,000 or more be performed by a licensed contractor with a valid contractor's license for marine class construction, except for construction performed by a private landowner for strictly private purposes. Your signature on and acceptance of this permit denotes your understanding of the stated law regarding use of licensed contractors. **All listed special and general conditions will remain in effect for the life of the permit. This applies to permittee, future property owners, or permit assignees.**

**DESCRIPTION OF THE PROJECT, AS AUTHORIZED**

The plans submitted by you, attached hereto, show the work consists of the following: The work consists of constructing a new dock. Specifically, the applicant seeks to remove the existing 6' x 88' fixed wooden dock and install a new 6' x 90' fixed aluminum dock with hand rails within the same footprint, replace all wood piles with new concrete piles, replace existing 3' x 20' aluminum gangway leading to the existing 8' x 20' floating dock. The work described is for public use.

**SPECIAL CONDITIONS**

1. All remnants of the existing non-functional dock are removed from the critical area in conjunction with construction of the permitted dock.
2. Any disturbed critical area adjacent to the construction site be restored to original contours and conditions upon project completion.
3. Once project construction is initiated, it is carried to completion in an expeditious manner in order to minimize the period of disturbance to the environment.
4. The handrail height is limited to 36" above decking.
5. An as-built survey of the structure(s) must be submitted to the Department within 90 days from completion of construction. The survey must be performed by a registered land surveyor, must show all components of the structure(s), and must list the starting and ending coordinates of the structure(s) in the SC State Plane Coordinate System, which can be obtained by survey-grade Global Positioning System equipment.

SEE SPECIFIC  
CONTRACTS

6. In the event that any historic or cultural resources and/or archaeological materials are found during the course of work, the applicant must notify the State Historic Preservation Office and the South Carolina Institute of Archaeology and Anthropology. Historic or cultural resources consist of those sites listed in the National Register of Historic Places and those sites that are eligible for the National Register. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials.

# SOLE SPECIAL CONDITIONS

PERMITTEE'S ATTENTION IS DIRECTED TO GENERAL CONDITIONS NUMBERS FOUR (4) AND FIVE (5). BY ACCEPTANCE OF THIS PERMIT, PERMITTEE IS PLACED ON NOTICE THAT THE STATE OF SOUTH CAROLINA, BY ISSUING THIS PERMIT, DOES NOT WAIVE ITS RIGHTS TO REQUIRE PAYMENT OF A REASONABLE FEE FOR USE OF STATE LANDS AT A FUTURE DATE IF SO DIRECTED BY STATUTE.

THE PERMITTEE, BY ACCEPTANCE OF THIS PERMIT AGREES TO ABIDE BY THE TERMS AND CONDITIONS CONTAINED HEREIN AND TO PERFORM THE WORK IN STRICT ACCORDANCE WITH THE PLANS AND SPECIFICATIONS ATTACHED HERETO AND MADE A PART HEREOF. ANY DEVIATION FROM THESE CONDITIONS, TERMS, PLANS AND SPECIFICATIONS SHALL BE GROUNDS FOR REVOCATION, SUSPENSION OR MODIFICATION OF THIS PERMIT AND THE INSTITUTION OF SUCH LEGAL PROCEEDINGS AS THE DEPARTMENT MAY CONSIDER APPROPRIATE.

Permit Number: **OCRM02243**

**Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.**

  
PERMITTEE(S)  
John Stieglitz, Colleton County

6-22-2020  
DATE

**This permit becomes effective when the State official, designated to act for the Office of Ocean and Coastal Resource Management, has signed below.**

  
CRITICAL AREA PERMITTING PROJECT MANAGER  
Joshua D Hoke  
Or Other Authorized State Official

6/5/20  
DATE

X

# SPECIAL CONDITION(S)

## GENERAL CONDITIONS:

This construction and use permit is expressly contingent upon the following conditions which are binding on the permittee:

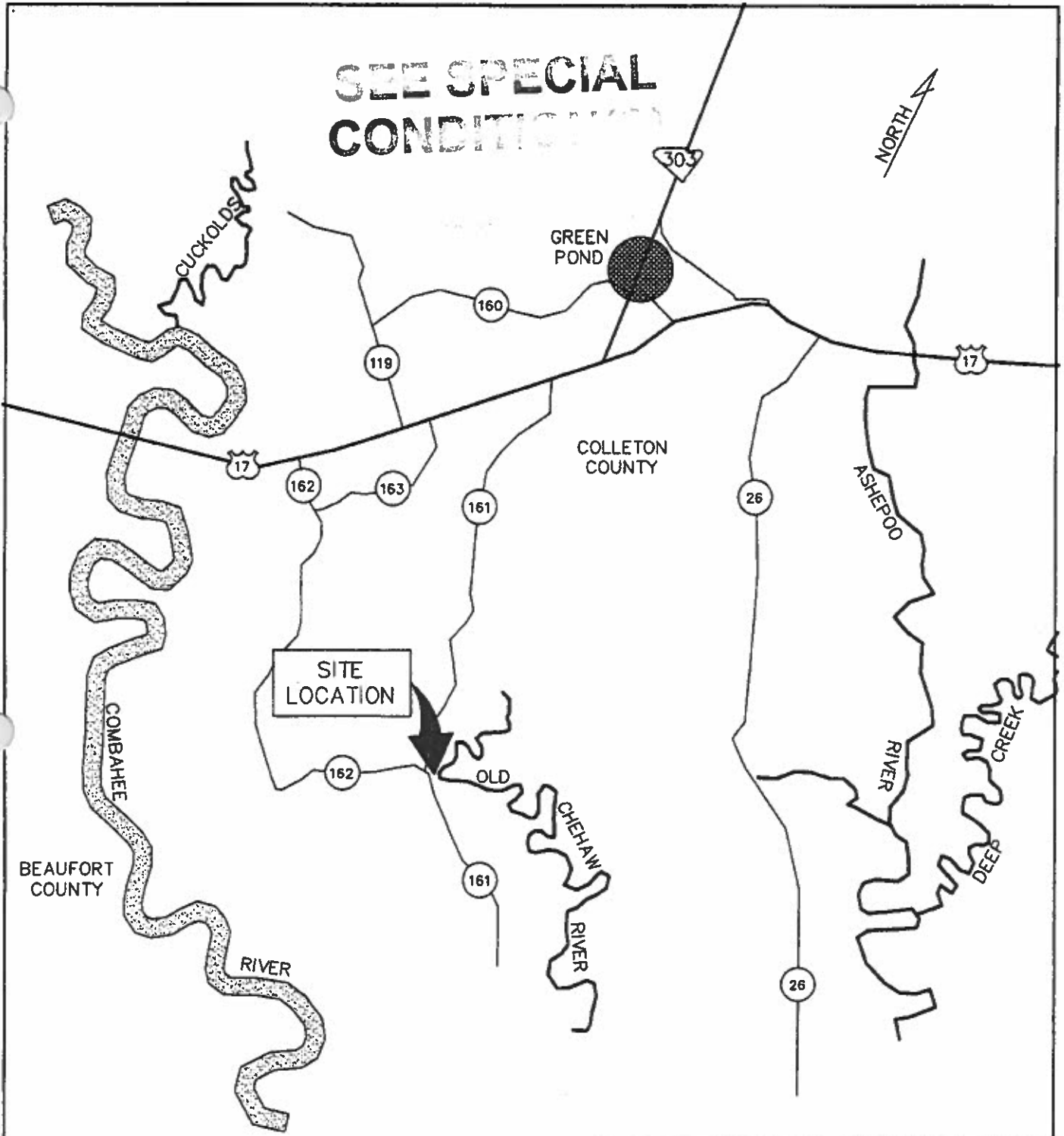
1. The permittee, in accepting this permit, covenants and agrees to comply with and abide by the provisions and conditions herein and assumes all responsibility and liability and agrees to save the Department and the State of South Carolina, its employees or representatives, harmless from all claims of damage arising out of operations conducted pursuant to this permit.
2. If the activity authorized herein is not constructed or completed within five years of the date of issuance, this permit shall automatically expire. A request, in writing, for an extension of time shall be made not less than thirty days prior to the expiration date.
3. All authorized work shall be conducted in a manner that minimizes any adverse impact on fish, wildlife and water quality.
4. This permit does not relieve the permittee from the requirements of obtaining a permit from the U. S. Army Corps of Engineers or any other applicable federal agency, nor from the necessity of complying with all applicable local laws, ordinances, and zoning regulations. This permit is granted subject to the rights of the State of South Carolina in the navigable waters and shall be subject, further, to all rights held by the State of South Carolina under the public trust doctrine as well as any other right the State may have in the waters and submerged lands of the coast.
5. This permit does not convey, expressly or impliedly, any property rights in real estate or material nor any exclusive privileges; nor does it authorize the permittee to alienate, diminish, infringe upon or otherwise restrict the property rights of any other person or the public; nor shall this permit be interpreted as appropriating public properties for private use.
6. The permittee shall permit the Department or its authorized agents or representatives to make periodic inspections at any time deemed necessary to ensure that the activity being performed is in accordance with the terms and conditions of this permit.
7. Any abandonment of the permitted activity will require restoration of the area to a satisfactory condition as determined by the Department
8. This permit may not be transferred to a third party without prior written notice to the Department, either by the transferee's written agreement to comply with all terms and conditions of this permit or by the transferee subscribing to this permit and thereby agreeing to comply.
9. If the display of lights and signals on any structure or work authorized herein is not otherwise provided for by law, such lights and special signals as may be prescribed by the United States Coast Guard shall be installed and maintained by and at the expense of the permittee.
10. The permit construction placard or a copy of the placard shall be posted in a conspicuous place at the project site during the entire period of work.
11. The structure or work authorized herein shall be in accordance with the permit, as issued, and shall be maintained in good condition. Failure to build in accordance with the permit, as issued, or failure to maintain the structure in good condition, shall result in the revocation of this permit.



# SEE SPECIAL CONDITIONS

12. The authorization for activities or structures herein constitutes a revocable license. The Department may require the permittee to modify activities or remove structures authorized herein if it is determined by the Department that such activity or structures violates the public's health, safety, or welfare, or if any activity is inconsistent with the public trust doctrine. Modification or removal under this condition shall be ordered only after reasonable notice stating the reasons therefore and provision to the permittee of the opportunity to respond in writing. When the Permittee is notified that the Department intends to revoke the permit, Permittee agrees to immediately stop work pending resolution of the revocation.
13. The Department shall have the right to revoke, suspend, or modify this permit in the event it is determined the permitted structure (1) significantly impacts the public health, safety and welfare, and/or is violation of Section 48-39-150, (2) adversely impacts public rights, (3) that the information and data which the permittee or any other agencies have provided in connection with the permit application is either false, incomplete or inaccurate, or (4) that the activity is in violation of the terms and/or conditions, including any special conditions of the permit. That the permittee, upon receipt of the Department's written intent to revoke, suspend, or modify the permit has the right to a hearing. Prior to revocation, suspension, or modification of this permit, the Department shall provide written notification of intent to revoke to the permittee, and permittee can respond with a written explanation to the Department. (South Carolina Code Section 1-23-370 shall govern the procedure for revocation, suspension or modification herein described).
14. Any modification, suspension or revocation of this permit shall not be the basis of any claim for damages against the Department or the State of South Carolina or any employee, agent, or representative of the Department or the State of South Carolina.
15. All activities authorized herein shall be, if they involve a discharge or deposit into navigable waters or ocean waters, at all times consistent with all applicable water quality standards, effluent limitations, and standards of performance, prohibitions, and pretreatment standards established pursuant to applicable federal, state and local laws.
16. Extreme care shall be exercised to prevent any adverse or undesirable effects from this work on the property of others. This permit authorizes no invasion of adjacent private property, and the Department assumes no responsibility or liability from any claims of damage arising out of any operations conducted by the permittee pursuant to this permit.

**SEE SPECIAL  
CONDITIONS**

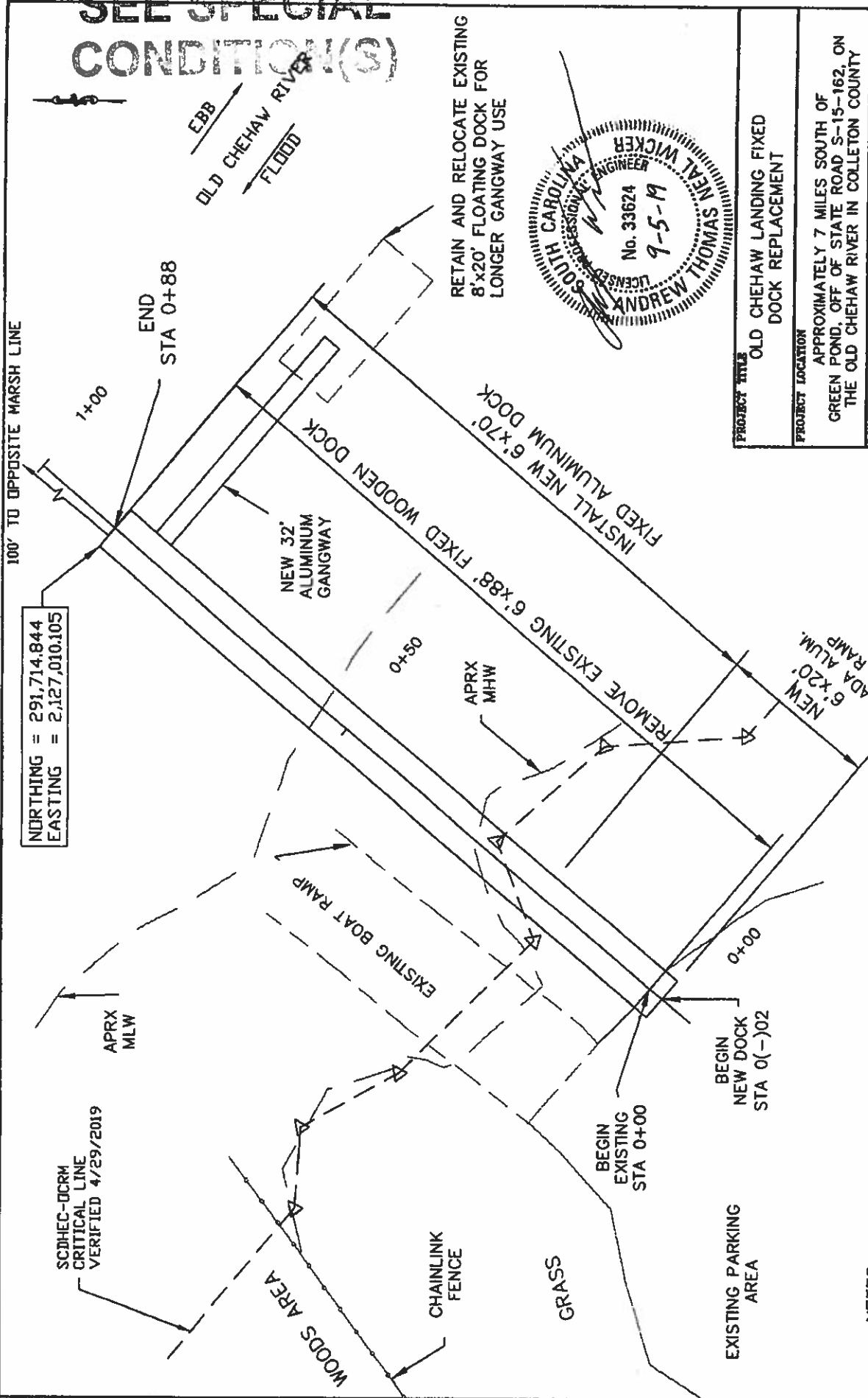


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<b>DRAWING SCALE</b>	NONE	<b>DATE</b>	11-7-17
<b>APPLICATION #</b>		<b>SHEET</b>	1 of 4

REVISION	DATE

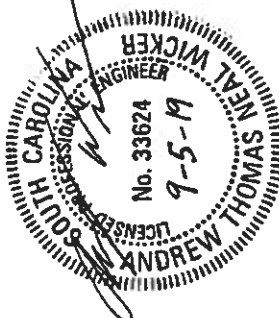
A

**SEE SPECIAL  
CONDITION(S)**



NORTHING = 291,714.844  
EASTING = 2,127,010.105

SCDHEC-DCRM  
CRITICAL LINE  
VERIFIED 4/29/2019



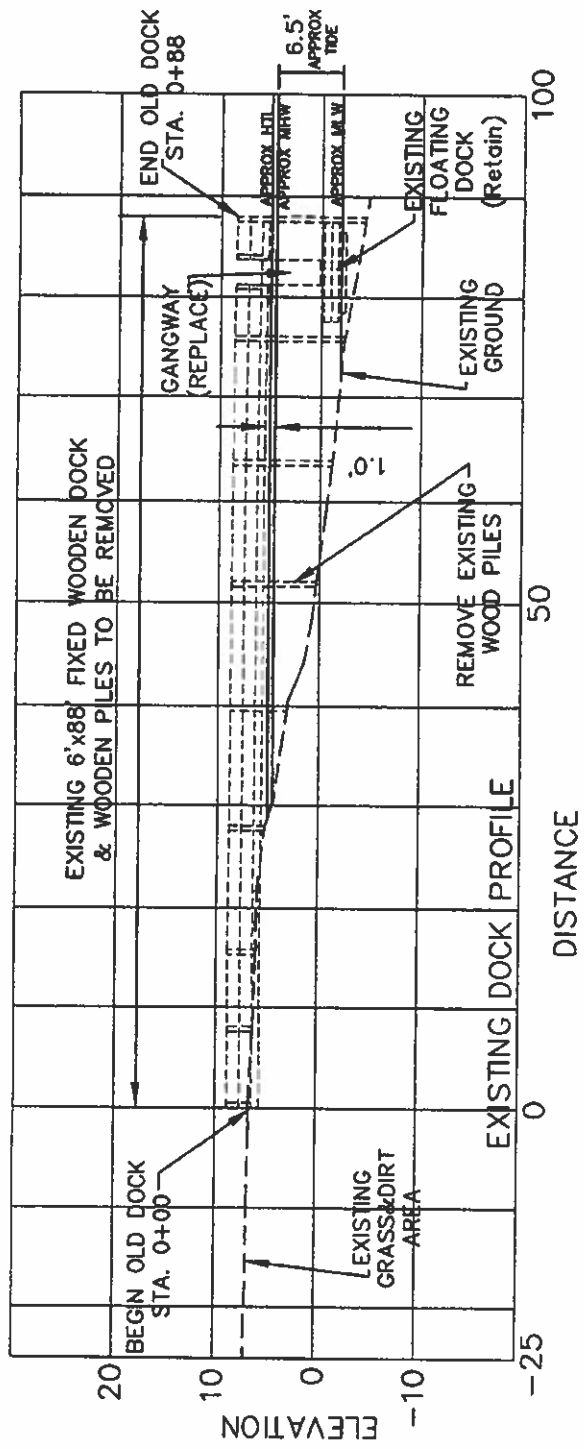
RETAIN AND RELOCATE EXISTING  
8'x20' FLOATING DOCK FOR  
LONGER GANGWAY USE

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SHEET	2 of 4

REVISION	DATE
REVISED	2-1-18
REVISED	9-1-19

- NOTES:
- ELEVATIONS BASED ON MEAN SEA LEVEL (MSL) DATUM NAD 83.
  - DCRM CRITICAL LINE VERIFIED ON 5/8/2019

SM SPECIAL  
 COLLETON COUNTY



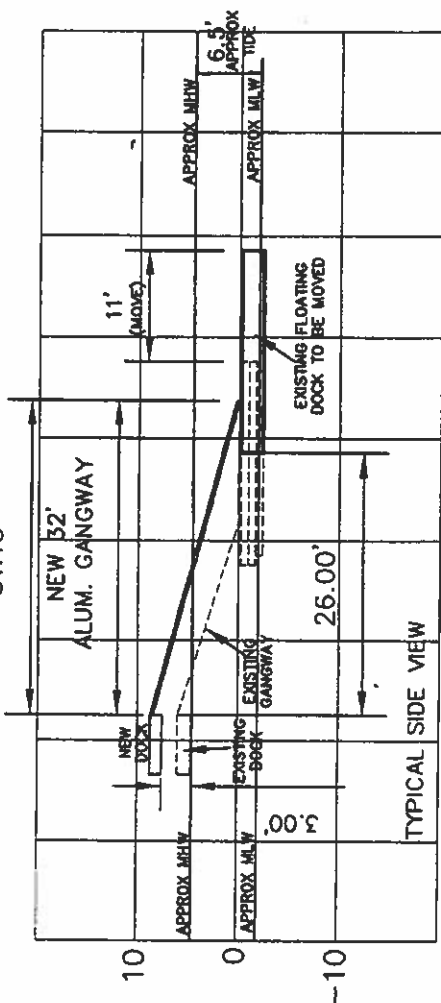
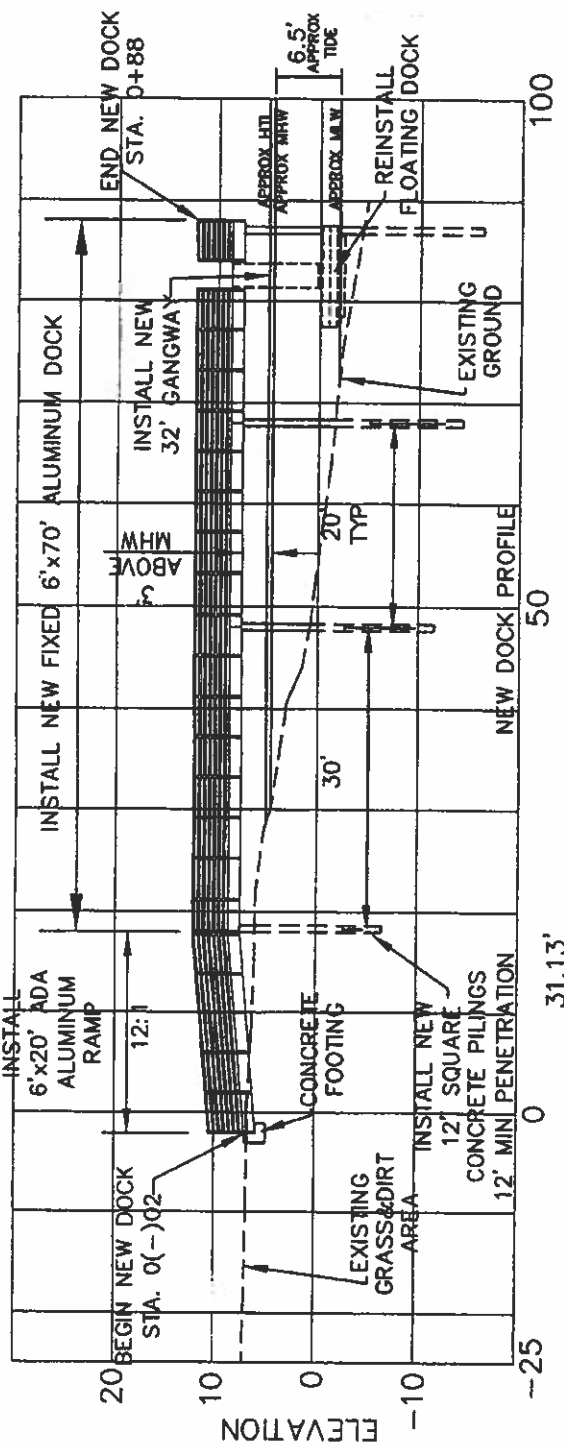
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<b>APPLICATION #</b>	SUBST 3 of 4

2

SEE SPECIAL  
CONDITIONS

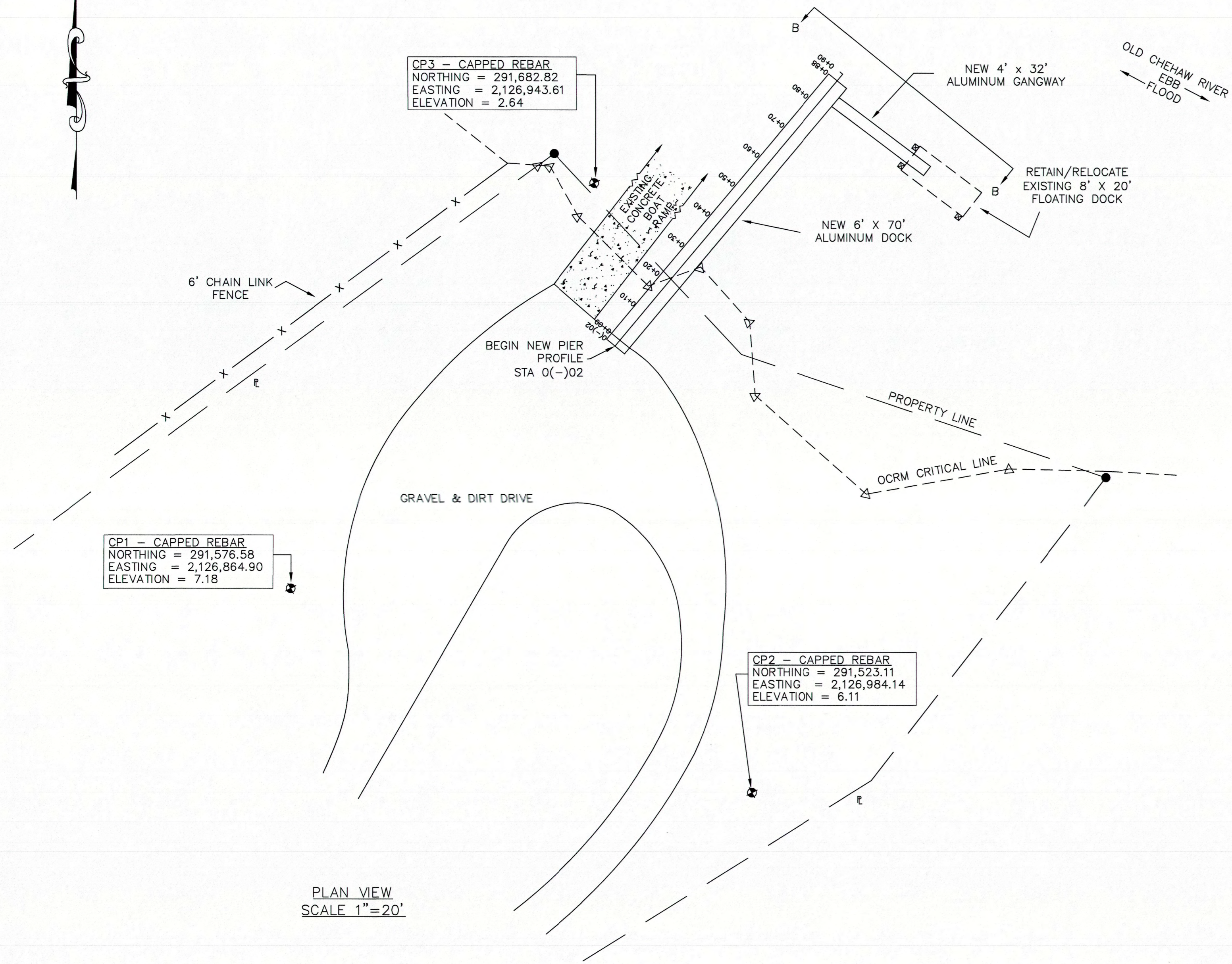


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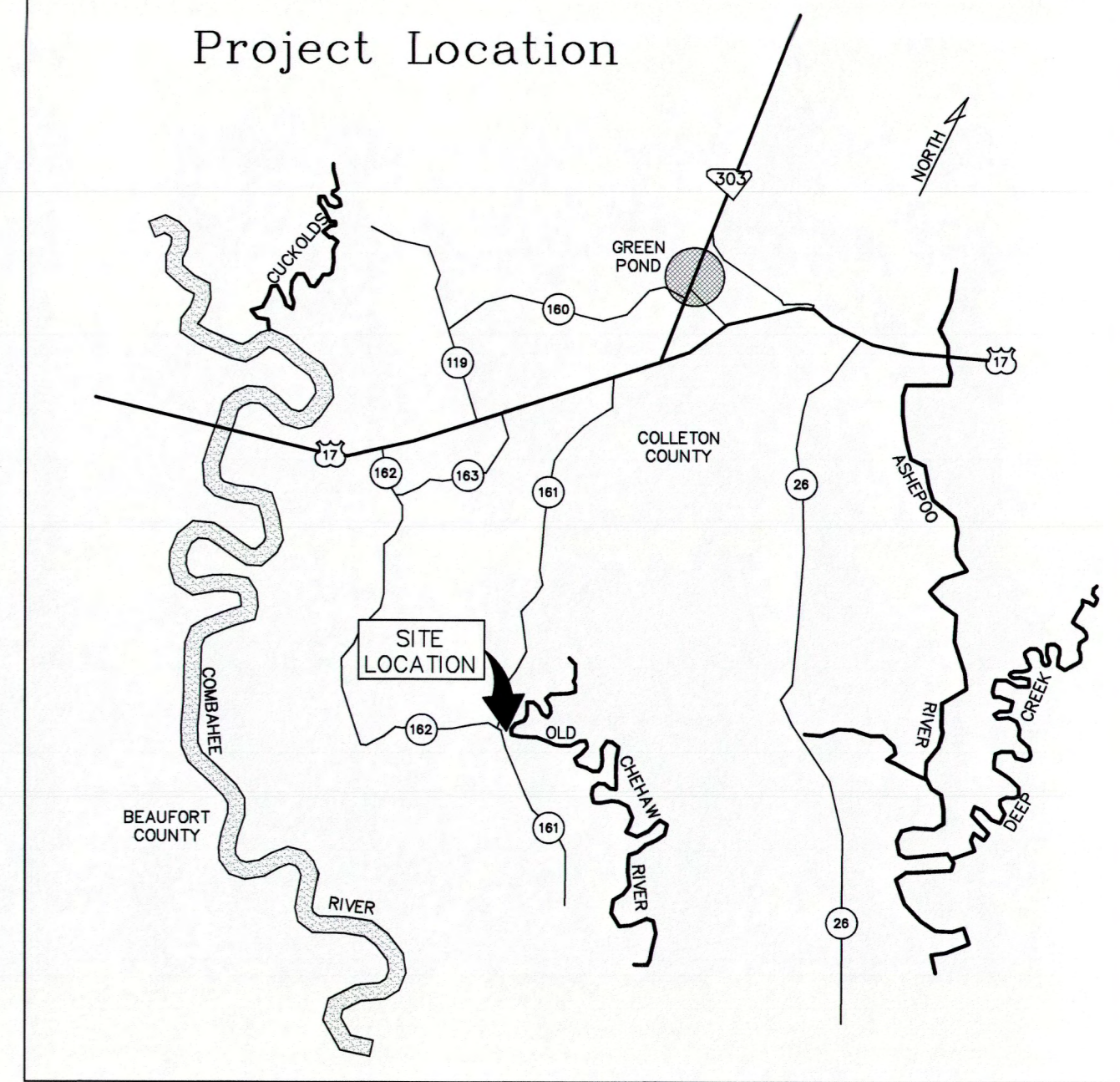
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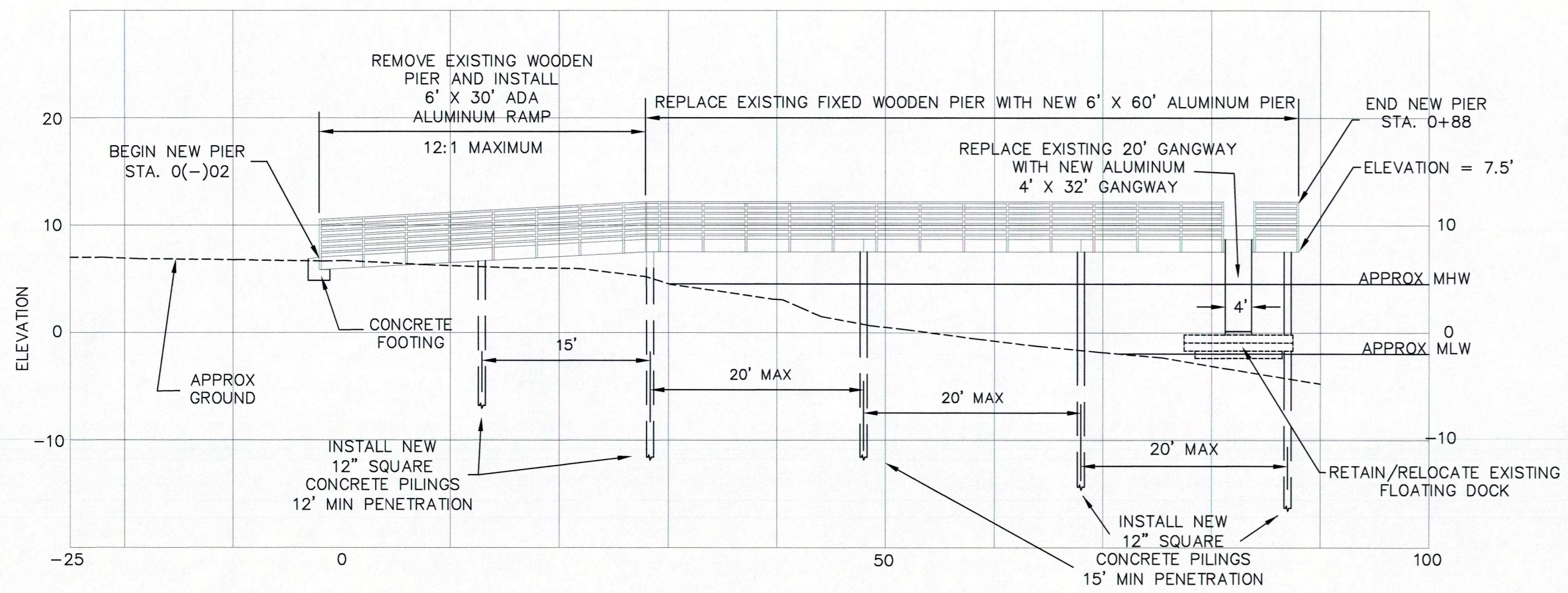
PLAN VIEW  
SCALE 1"=20'



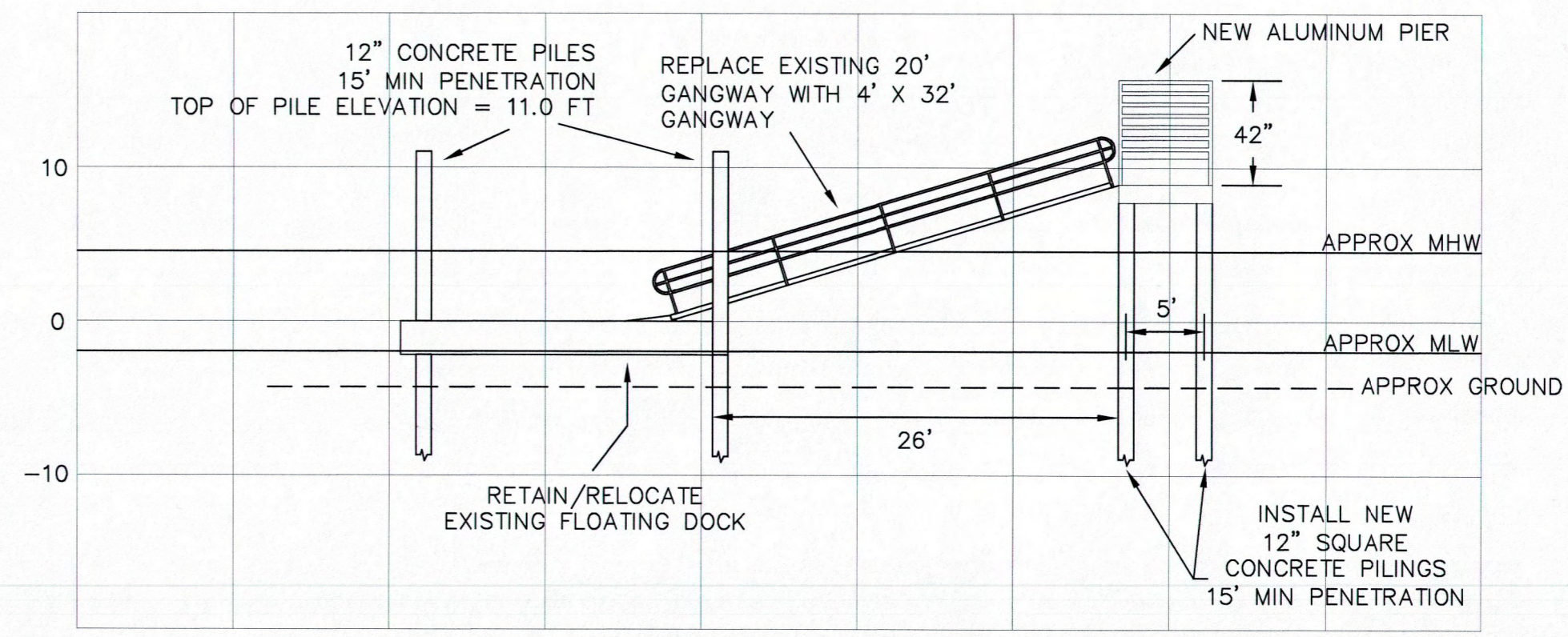
Project Location

NOTES:

- 1) THE BEARING AND DISTANCE FROM CP#1 TO STA 0(-)02 OF FIXED PIER IS N 53°00'54" E AT 105.45'.
- 2) THE BEARING AND DISTANCE FROM CP#3 TO STA 0(-)02 OF FIXED PIER IS S 07°21'32" E AT 43.15'.
- 3) ALL PILES SHALL BE DRIVEN TO THE PENETRATION SHOWN ON THE PROFILES.
- 4) THE END OF THE ALUMINUM ADA RAMP FOR THE FIXED PIER SHALL BE TIED IN TO THE EXISTING GROUND.
- 5) SHOP DRAWINGS SHALL BE SUBMITTED TO COLLETON COUNTY & SCDNR ENGINEERING FOR APPROVAL PRIOR TO THE MANUFACTURING OF THE DOCK SYSTEMS.
- 6) ALL HARDWARE SHALL BE COMPATIBLE WITH TYPE OF TREATMENT AND ALUMINUM STRUCTURE. THE SIZE AND TYPE OF CONNECTORS SHALL BE NOTED WITHIN THE SHOP DRAWINGS.
- 7) ALL PILES TO HAVE ANGLED PILE CAPS.
- 8) ELEVATIONS BASED ON MEAN SEA LEVEL (MSL) DATUM NAD 83.
- 9) ALL REMNANTS OF THE EXISTING NON-FUNCTIONING DOCK SHALL BE REMOVED FROM THE CRITICAL AREA IN CONJUNCTION WITH CONSTRUCTION OF PERMITTED DOCK.
- 10) NEW DOCK END STA 0+88 PER PERMIT REQUIREMENTS.
- 11) AN AS-BUILT SURVEY OF THE STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR PER SCDHEC PERMIT REQUIREMENTS.



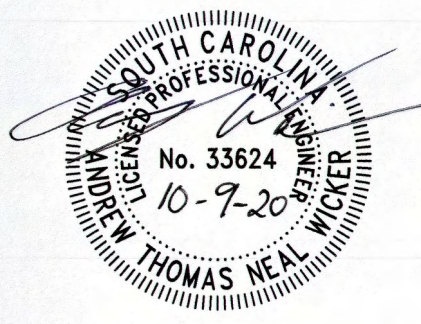
FIXED PIER PROFILE  
SCALE 1" = 10'



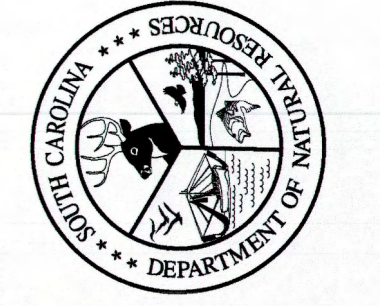
SECTION VIEW B-B  
SCALE 1" = 10'

DATE	REVISION	NUMBER	STATE PROJECT NUMBER

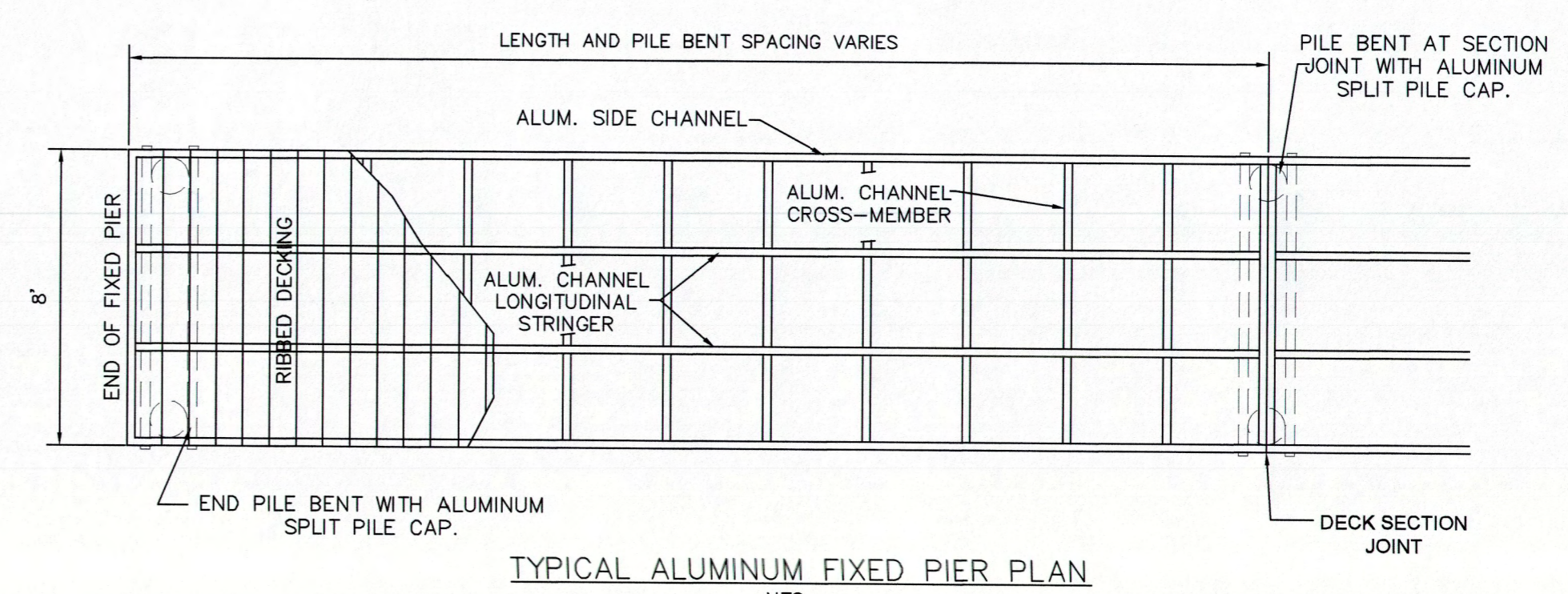
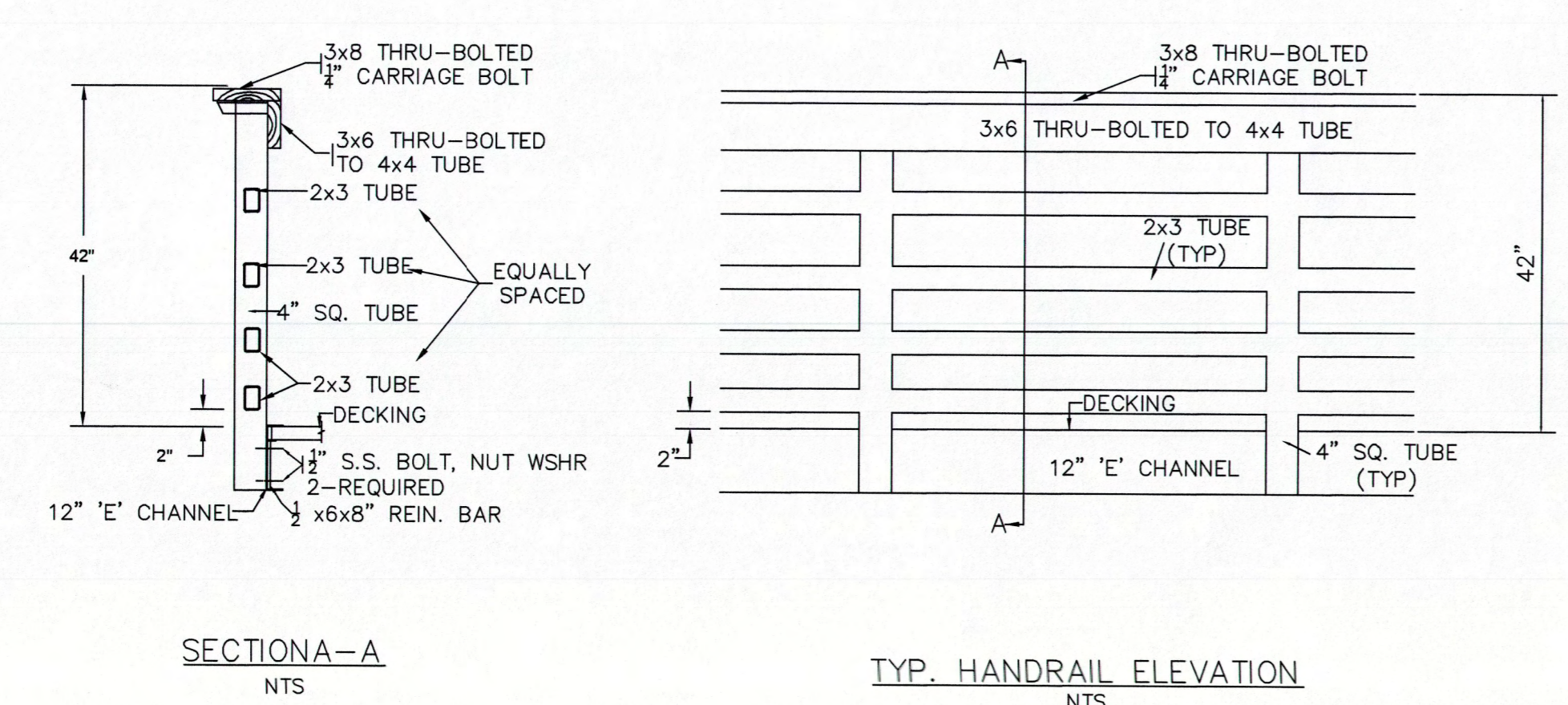
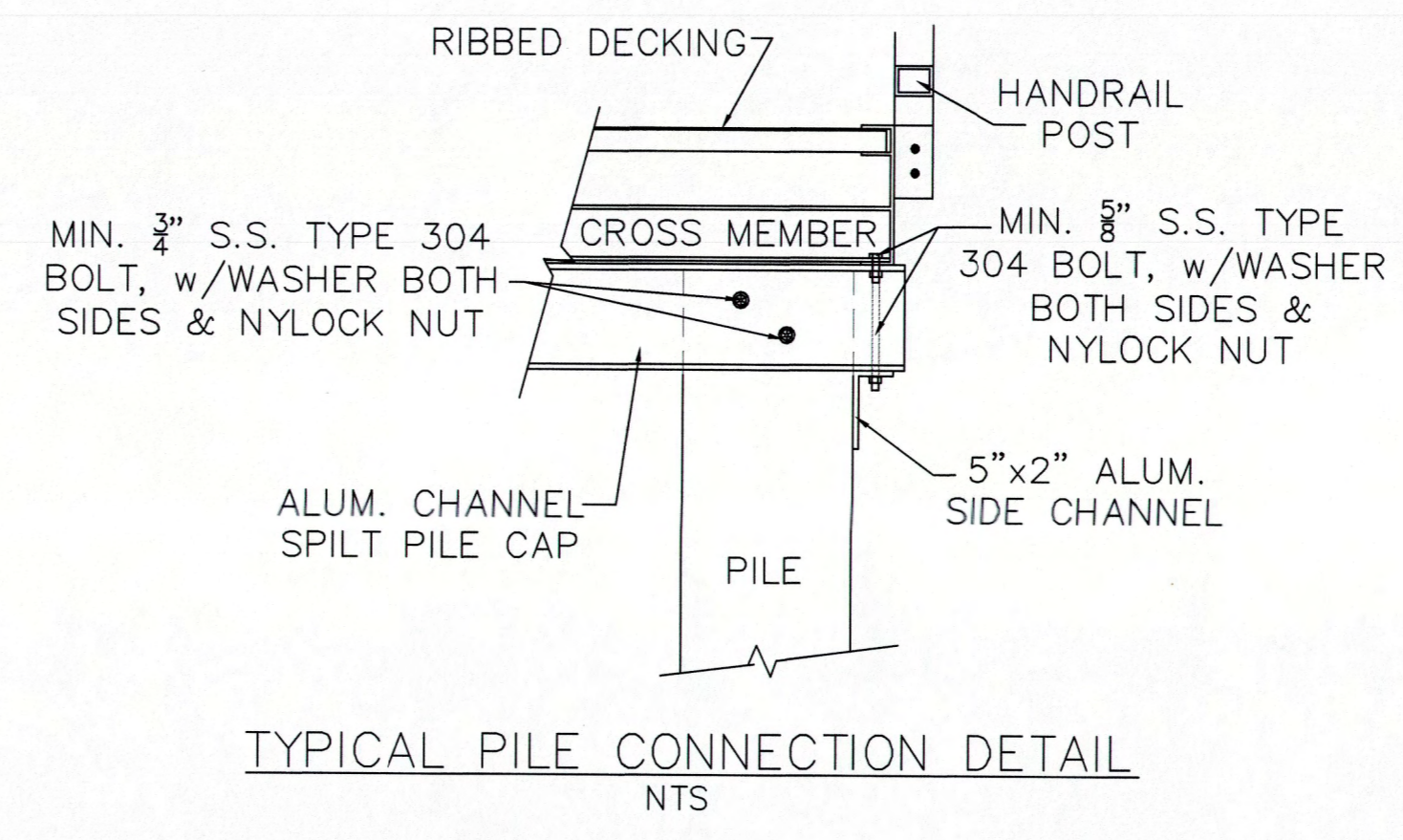
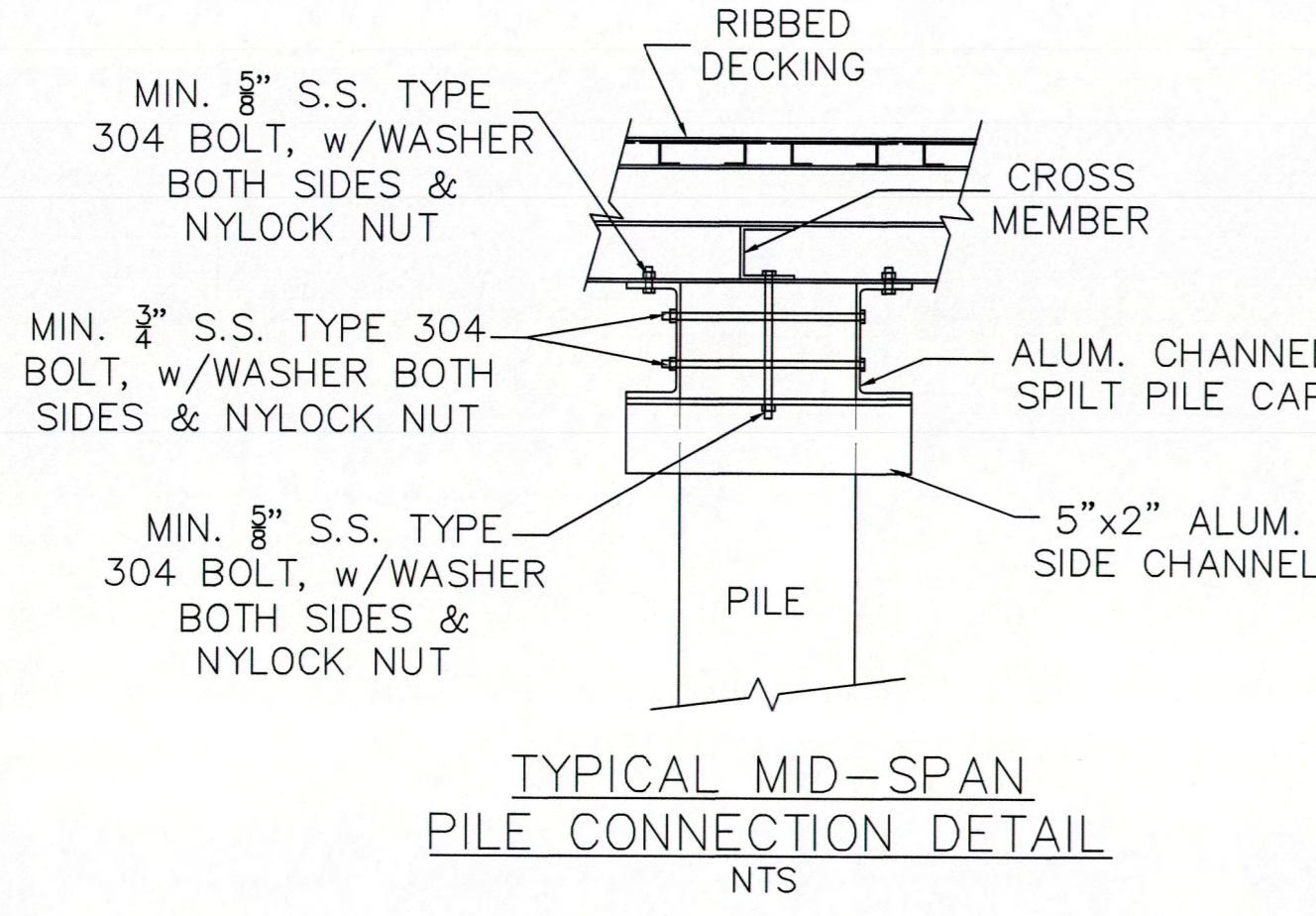
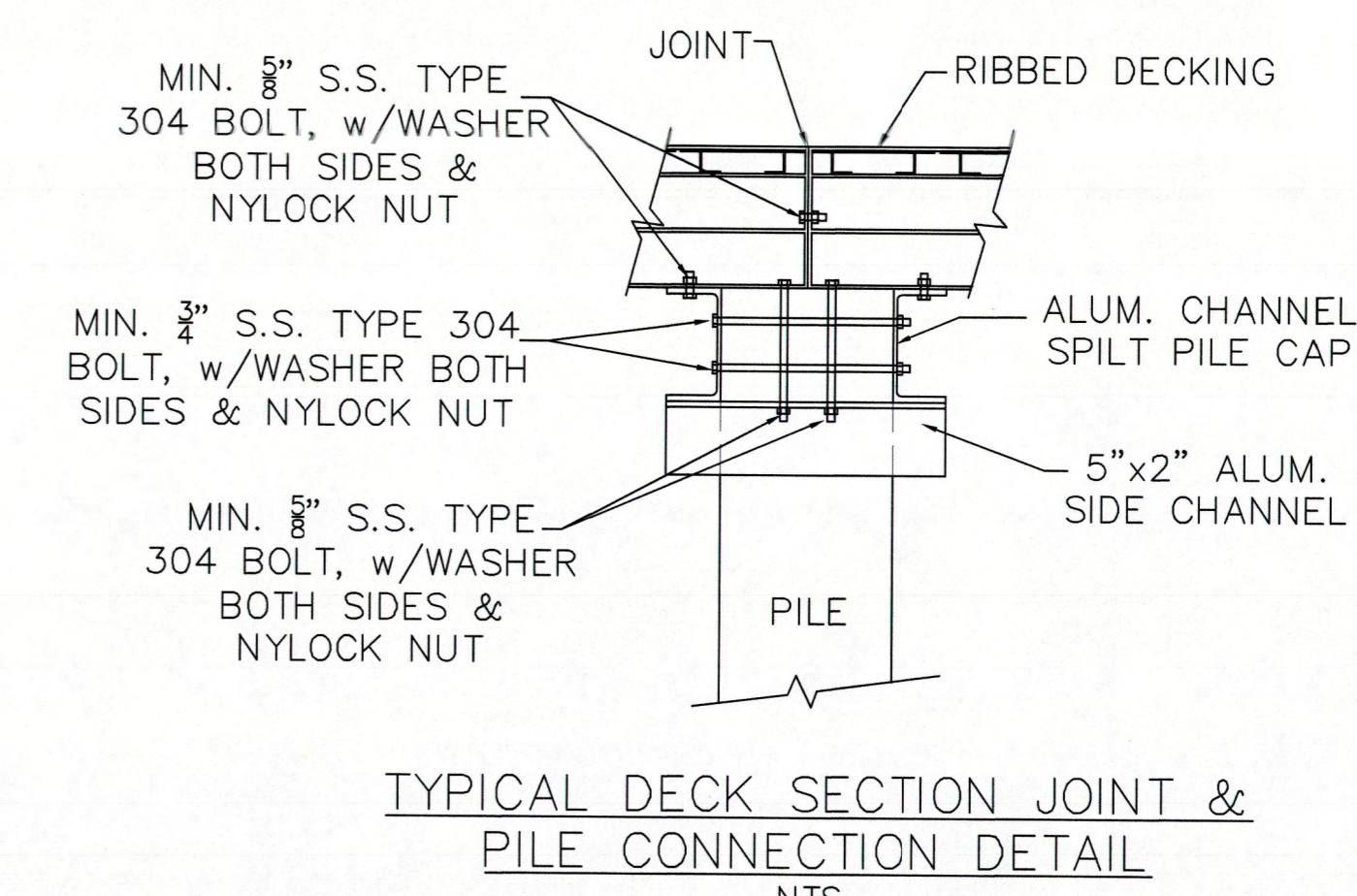
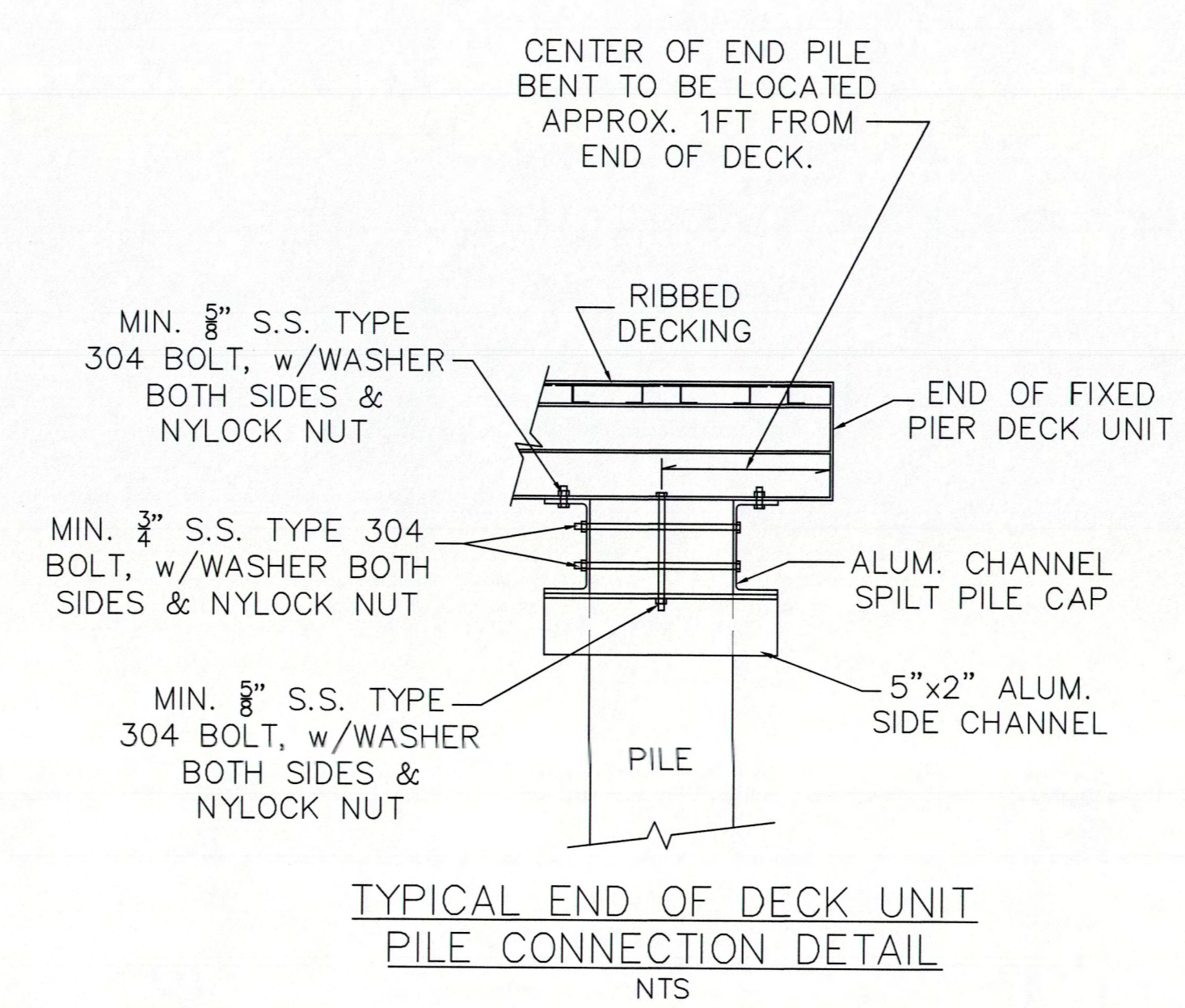
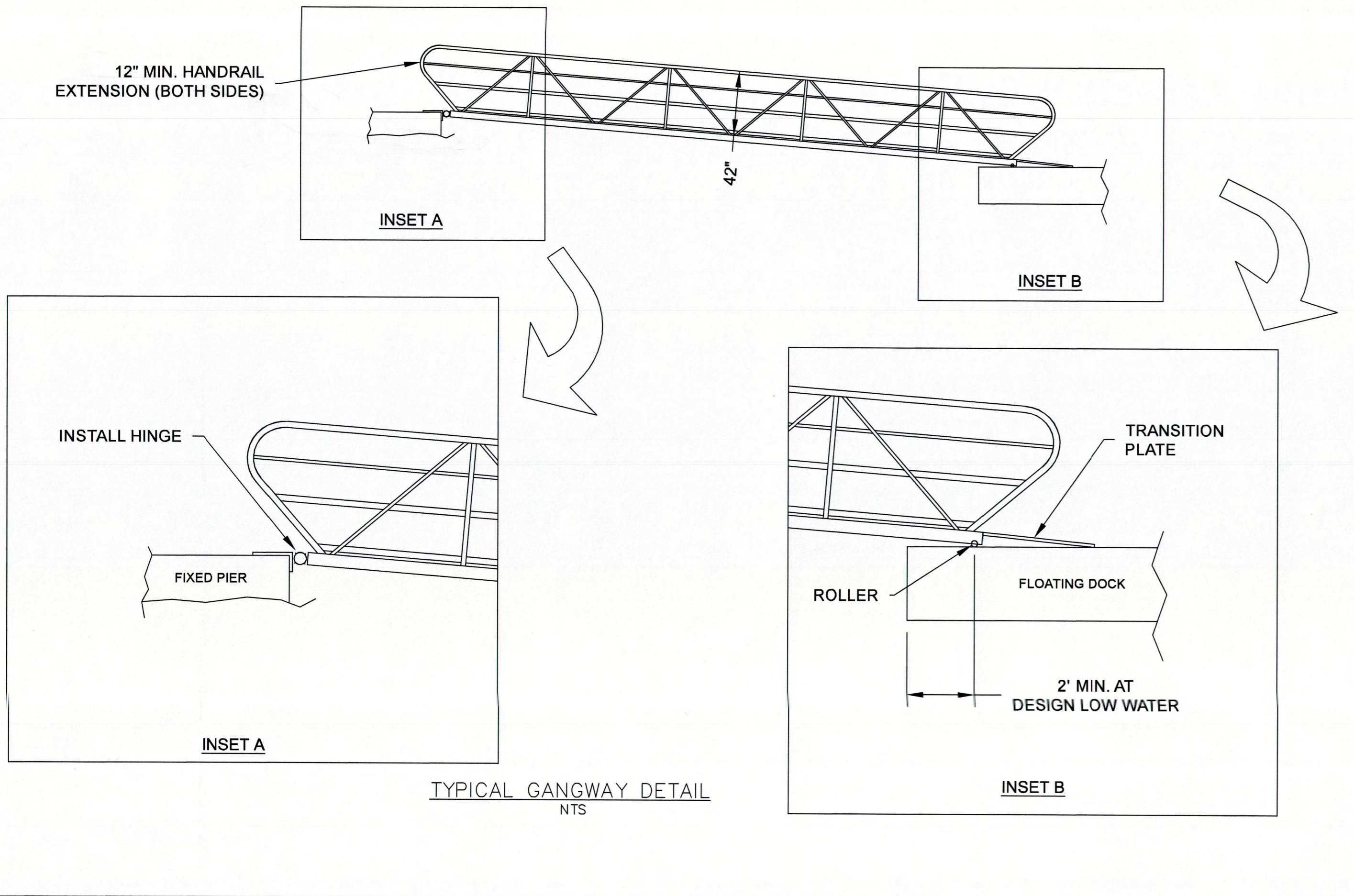
PROJECT TITLE	SHEET TITLE
COLLETON COUNTY - OLD CHEHAW LANDING FIXED PIER REPLACEMENT	PLAN & PROFILE



South Carolina  
Department of Natural Resources  
Engineering & Boating Access



DATE:	8/10/2020
SCALE:	AS SHOWN
DRAWN BY:	Matt Owens
CHECKED BY:	ATW
SHEET:	1 of 2 Sheets

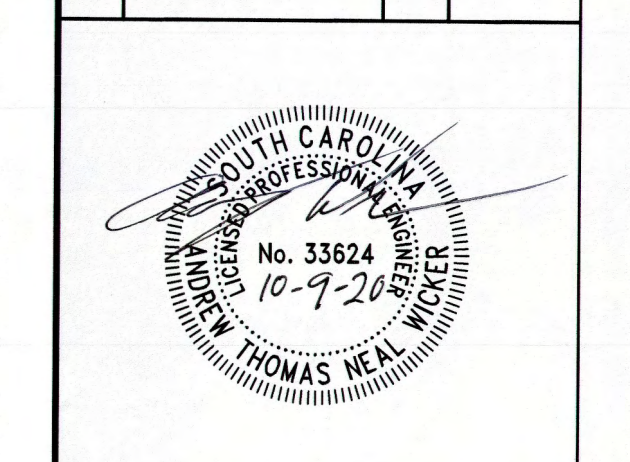


NUMBER	REVISION	DATE

STATE PROJECT NUMBER: \_\_\_\_\_

PROJECT TITLE: COLLETON COUNTY - OLD CHEHAW LANDING FIXED DOCK REPLACEMENT

SHEET TITLE: DETAILS



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