



**REQUEST FOR BID**  
**FOR**  
**The City of Wilmington**  
**Riverfront-Riverwalk Best Western Pier Demo**

**DEMO-0624**

**City of Wilmington**  
**Skyline Center**

929 North Front Street, 10TH FLOOR  
P O Box 1810  
Wilmington, NC 28401  
910-341-7830

Date Issued: Friday, June 03,2024

Date Due: Thursday, June 27, 2024, at 3:00 PM ET

Project Manager: Anthony Geathers

Administered By: Christine R. Karem, Sr. Contract Specialist – M/WBE Coordinator



## **Riverfront-Riverwalk Best Western Pier Demo**

**DEMO-0624**

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ADVERTISEMENT FOR BID  
CITY OF WILMINGTON, NC  
DEMOLITION – RIVERFRONT-RIVERWALK BEST WESTERN PIER  
CONTRACT NUMBER: DEMO-0624

Sealed proposals addressed to the Sr. Contract Specialist, P. O. Box 1810, 929 N Front Street, 10th Floor, Wilmington, NC 28402, and marked “Demolition – RIVERFRONT-RIVERWALK BEST WESTERN PIER” will be received until **3:00 p.m., Thursday, June 27, 2024**, at which time they will be publicly opened and read at the Purchasing Division, 929 N. Front Street, 1<sup>st</sup> Floor, Room 154-B, Wilmington, NC.

Project Description: DEMOLITION OF RIVERFRONT-RIVERWALK BEST WESTERN PIER

All firms submitting bids for the proposed work must be properly licensed. The bidder’s license number must appear on the outside of the envelope.

In accordance with the City of Wilmington’s Minority/Disadvantaged Business Policy, the bidder shall make good faith efforts, as defined by the Bid Specifications, to subcontract 14% of the dollar value of the prime contract to businesses which are at least 51% owned and controlled by minority, socially, and/or economically disadvantaged individuals (MWBE/DBE’s). A complete copy of the City of Wilmington’s MWBE/DBE policy is available for inspection at the Purchasing Manager’s Office.

Potential Subcontract opportunities which may exist on this project include, but may not be limited to: Hauling, Suppliers and other items not specifically referenced herein.

**A Pre-Bid Conference will be held at 929 N. Front Street, 1st Floor, Room 154-B, Wilmington, NC at 10:00 A.M., Thursday, June 13, 2024.**

Potential subcontractors may secure a list of potential prime contractors from the City’s Web Site, [www.wilmingtonnc.gov](http://www.wilmingtonnc.gov)

The City of Wilmington does not discriminate on the basis of race, sex, color, age, national origin, religion or disability in its employment opportunities, programs, services, or activities.

Bids for this project shall be guaranteed by all bidders for a period of 90 calendar days following the bid opening.

**THE CITY OF WILMINGTON RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS.**

Christine R. Karem  
Sr. Contract Specialist  
June 03, 2024

STATE OF NORTH CAROLINA

COUNTY OF NEW HANOVER

AFFIDAVIT AND CERTIFICATE OF  
NON-COLLUSION, NON-SUSPENSION AND NON-CONVICTION

The undersigned, being first duly sworn, deposes and says:

1. I understand that for the purposes of this affidavit, the term "bidder" shall include the person(s), firm(s), or corporation(s) signing this affidavit, the undersigned's subcontractor(s), subsidiary(ies) and affiliate(s) and any officer, director, employee or agent of the bidder; and the term "conviction" shall include guilty pleas, pleadings of nolo contendere and similar pleas.

2. This Affidavit and Certificate is made in accordance with Article 3 of Chapter 133 of the North Carolina General Statutes; I certify that this proposal is made without prior understanding, agreement, or connection with any person(s), firm(s), or corporation(s) making bids or proposals; I further certify that the bidder has not entered into any agreement with any other bidder or prospective bidder or with any other person(s), firm(s) or corporation(s) relating to the price named in said proposal, nor any agreement or arrangement under which any person(s), firm(s) or corporation(s) is to refrain from bidding, nor any agreement or arrangement for any act or omission in restraint of free competition among bidders; I understand collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards; and I further certify that the bidder will abide by all terms of this bid or proposal.

3. The bidder is not suspended or debarred from bidding by any federal or state governmental agency that is providing funds for this contract.

4. The bidder is not presently charged in an indictment or information with engaging in any conspiracy, combination, or other unlawful act in restraint of trade or any similar charges in any federal court or a court of this or any other state.

5. The bidder, within one year immediately preceding the date of this affidavit, has not been convicted of charges or engaging in any conspiracy, combination, or other unlawful act in restraint of trade or similar charges in any federal court or a court of this or any other state.

6. If, during the time of this proposal, from the date advertised to the date bids are opened, the bidder is indicted or convicted of bid-rigging, I understand this proposal shall be rejected and not considered for award.

7. I hereby affirm that all information contained in this affidavit is true, correct, accurate and complete, and any untrue, incorrect, inaccurate or incomplete statements will result in the disqualification and rejection of this proposal. I certify that I am authorized to sign this bid and to make the representations set forth herein on behalf of myself and the bidder.

This the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

COMPANY NAME \_\_\_\_\_

BY: \_\_\_\_\_

Owner, Partner, or Corporate President, Vice President or  
Assistant Vice President only)

ATTEST:

\_\_\_\_\_  
(Secretary, Assistant Secretary,  
Cashier or Assistant Cashier only)

(CORPORATE SEAL)

(TO BE EXECUTED ON BEHALF OF THE CONTRACTOR)

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public, certify that  
(Name)

\_\_\_\_\_ personally came  
(Name of Secretary, Assist. Sec., Cashier, Assist. Cashier)

before me this day and acknowledged that they are the \_\_\_\_\_  
(Secretary, Assist. Sec., Cashier, Assist. Cashier)

of \_\_\_\_\_, a corporation, and that by authority  
(Name of Corporation)

duly given and as the act of the corporation, the foregoing Affidavit was signed in its name by

its \_\_\_\_\_, sealed with its corporate seal, attest by himself  
(President, Vice President, Assist. Vice President)

(or herself) as its \_\_\_\_\_.  
(Secretary, Assist. Sec., Cashier, Assist. Cashier)

WITNESS my hand and official seal, this the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Notary Public

(NOTARY SEAL)

My Commission Expires: \_\_\_\_\_

GENERAL SPECIFICATIONS  
DEMOLITION WORK

- G-1. Scope: The work covered by these specifications consists of furnishing all labor, equipment, and materials necessary to demolish and remove from the premises the building(s) listed on the attached.
- G-2. Removal of Debris: All debris of all descriptions shall be removed completely, including all materials above ground, all wood, rubbish shall be removed from the site and disposed of by the Contractor **except as may be outlined in the Scope of Work**. All land fill fees or disposal fees of any kind shall be paid for by the Contractor. All materials shall be disposed of in accordance with applicable state and federal law. Disposal by land filling shall be at a landfill that has obtained all permits required by North Carolina law. **The entire site shall also be cleared of any debris, overgrown brush, trash, or other waste material. The Contractor shall leave the site clean and free of all debris whether the debris is associated with the demolition or not. Live trees shall not be damaged or removed as part of the demolition.**
- G-3. Safety Requirements: The Contractor shall secure the area around the buildings by use of signs, fencing, barricades and personnel to assure that only authorized personnel will be on the site from the time of the beginning until completion. The Contractor shall not leave any part of the structure in a hazardous condition overnight or at any time. In addition, all rules and regulations of the Department of Labor, Occupational Safety and Health Administration, shall be abided by. **The Contractor shall leave the site in a safe condition following the completion of demolition activities. Any and all tripping or falling hazards must be mitigated.**
- G-4. Notification of Commencement of Work: The utility companies shall be notified by the Contractor and check made by them as to the location of any underground services on the site, and a proper disposition made prior to commencement of work.
- The Contractor shall notify Duke Energy, Cape Fear Public Utility Authority, Time Warner, Piedmont Natural Gas and any other utility provider as is necessary to disconnect any service and remove any meters and/or lines from the buildings.
- PLEASE REFER TO TECHNICAL SPECIFICATIONS AND PLANS**
- G-5. Grading of Site: All impervious surfaces are to remain. Contractor shall take care to not to significantly damage the concrete, asphalt and other impervious surfaces on site during demolition. No wood or other construction debris will be allowed in any fill material used. The fill area of the site shall be seeded with an approved grass seed and straw shall be spread over the area after the completion of demolition.
- G-6. Permit: The Contractor shall obtain, all necessary construction permits and approvals prior to commencing work.

G-7. Salvage: All fixtures, construction and components which are shown on the contract drawings to be removed shall be removed and disposed of off facility property, unless otherwise noted in the drawings. See specifications for more information. .

G-8. Commencement and Completion of Work: The commencement of this work for this pier shall begin not later than ten (10) days after written notification to proceed is received from the Purchasing Manager. When work is started, it shall be continuous until completed. Payment shall be made after completion and acceptance of the work for this structure and a purchase order shall be issued for this structure.

G-9. Insurance: Before commencing work, Contractor shall obtain at his own expense, and agrees to keep in effect during the life of this contract as a minimum requirement, the following insurance in a company or companies acceptable to the City.

- A. **Workmen's Compensation and Occupational Disease Insurance** meeting the statutory requirements of the State in which work is to be performed and Employer's Liability Insurance in an amount of at least \$3,000,000. The U.S. Longshoremen and Harbor Workers' Compensation Act endorsement shall be attached to the policy when the services will be on or in close proximity to navigable waterways. The Maritime Coverage endorsement (WC 00 02 01) shall be attached to the policy when the contracted services involve the use of watercraft
- B. **Commercial General Liability Insurance** that provides coverage for Demolition Liability Insurance and if necessary, Commercial Umbrella Liability insurance with a total limit of not less than \$3,000,000 each occurrence for bodily injury and property damage. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/ location or the general aggregate shall be twice the required limit. This insurance shall be on an occurrence basis and shall protect the Contractor against liability arising from his operations, operations by subcontractors, elevators, products, completed operations, and contractual liability assumed under the indemnity provisions above insured. XCU exclusions must be deleted when applicable to operations performed by Contractor or his subcontractors.
- C. **Automobile Liability** on an occurrence basis covering all owned, non-owned, and hired automobiles for limits equal to those in B above.

**NOTE**: If contract requires higher limits, they will apply.

- G-10. Insurance, Proof of Carriage: The Contractor shall furnish a schedule of insurance carried under this contract in the form of a document attested by the insurance carrier, stating and itemizing the several coverages as provided above. The insurance carriers shall also certify on these documents that they will notify the City by registered mail at least ten (10) days prior to any change, cancellation or lapse of these policies. This schedule shall be in six counterparts and when the contract is signed by the Contractor a copy thereof shall be inserted in each copy of the contract documents and, upon insertion, such shall become a part of such documents.
- G-11. Subletting: The Contractor shall keep all work under his own control and shall not assign, by power of attorney or otherwise, nor sublet the work or any part thereof without the written consent of the City. Written consent by the City to sublet or assign any portion of the contract shall not relieve the Contractor of any responsibility for the fulfillment of the contract.
- G-12. Release and Indemnity: To the fullest extent permitted by law, Contractor shall release, indemnify, keep and save harmless the City, its agents, officials and employees, from any and all responsibility or liability for any and all damage or injury of any kind or nature whatever (including death resulting therefrom) to all persons, whether agents, officials or employees of the City or third persons and to all property proximately caused by, incident to, resulting from, arising out of, occurring in connection with, directly or indirectly, the performance or nonperformance by Contractor (or by any person acting for the Contractor or for whom the Contractor is or is alleged to be in any way responsible), whether such claim may be based in whole or in part upon contract, tort (including alleged active or passive negligence or participation in the wrong), or upon any alleged breach of and duty or obligation on the part of the Contractor, its agents, officials and employees or otherwise. The provisions of the Section shall include any claims for equitable relief of for damages (compensatory or punitive) against the City, its agents, officials, and employees including alleged injury to the business of any claimant and shall include any all losses, damages, injuries, settlements, judgments, decrees, awards, fines, penalties, claims, costs and expenses. Expenses as used herein shall include without limitation the costs incurred by the City, its agents, officials and employees, in connection with investigating any claim or defending any action and shall also include reasonable attorney's fees by reason of the assertion of any such claim against the City, its agents, officials or employees. The Contractor expressly understands and agree that any performance bond or insurance protection required by this agreement, or otherwise provided by the Contractor, shall in no way limit the Contractor's responsibility to release indemnify keep and save harmless and defend the City as herein provided. The intention of the parties is to apply and construe broadly in favor of the City the foregoing provisions subject to the limitations, if any, set forth in N.C.G.S. 22B-1.
- G-13. Guarantee: The Contractor hereby agrees to guarantee, for a period of one year after date of final payment, the work accomplished under this contract to the extent that he will repair any defects due to faulty workmanship or materials which may appear in his work during this period.
- G-14. Termination: In the event that review of the Contractor's performance shows non-conformance to the attached terms and conditions contained herein as a result of the Contractor's errors, omissions or negligent acts, the Contractor shall be in breach of this agreement and the City may take corrective action as it deems necessary including, but not limited to, withholding or reduction of payment. The City shall also have the right to suspend this agreement upon five (5) calendar days written notice to the Contractor. Such written notice shall state the reasons for suspension and allow for a review period of ten (10) days during which the Contractor shall be provided with an opportunity to respond with an explanation or justification and/or shall undertake any reasonable remedial action required by the City. If, in the opinion of the City, the



Contractor remains in violation of this agreement at the completion of the five (5) day suspension period, the City shall have the right to terminate this agreement whereupon all obligations of the City to the Contractor shall cease. In the event this project is terminated prior to completion of the services by the Contractor, the Contractor shall be paid for services performed to the date of termination. In no event will the amount due Contractor in the event of termination exceed that amount set forth in Paragraph 4 of the official contract.

- G-15. Personnel: It is mutually agreed that Contractor is an independent contractor and not an agent of the City, and as such the Contractor shall not be entitled to any City employment benefits, such as, but not limited to, vacation, sick leave, insurance, workmen's compensation, or pension and retirement benefits.
- G-16. Other Laws and Regulations: Contractor will comply with any and all applicable federal, state and local standards, regulations, laws statutes and ordinances regarding toxic, hazardous and solid wastes and any other pollutants; public and private nuisances; health or safety; an zoning, subdivision or other land use controls. Contractor will take all reasonably necessary, proper or required safety, preventative and remedial measures in accordance with any and all relations and directives from the North Carolina Department of Human Resources. The United States Environmental Protection Agency, the North Carolina Department of Environmental Management, Health Departments, and any other federal, state or local agency having jurisdiction, to ensure the prompt prevention or cessation (now or in the future) of violations of either the applicable provisions of such standards, regulations, laws, statutes, and ordinances or any permits or conditions issued thereunder. CONTRACTOR specifically acknowledges and agrees that CONTRACTOR, and any subcontractors it uses, has complied with and shall continue to comply with the provisions of the federal E-Verify program in compliance with Article 2 of Chapter 64 of the North Carolina General Statutes. CONTRACTOR shall maintain adequate safeguards with respect to sensitive customer information in conformance with and pursuant to 16 C.F.R. §681.1 and in accordance with N.C. Gen. Stat. §132-1.10 and §75-65.
- G-17. Non-Discrimination: Contractor will take affirmative action not to discriminate against any employee or applicant for employment or otherwise illegally deny any person participation in or the benefits of the program which is the subject of this agreement because of race, creed, color, sex, age, disability or national origin. To the extent applicable, Contractor will comply with all provisions of Executive Order No. 11246 the Civil Rights Act of 1964, (P.L. 88-352) and 1968 (P.L. 90-284), and all applicable federal, state and local laws, ordinances, rules, regulations, orders, instructions, designations and other directives promulgated to prohibit discrimination. Violation of this provision, after notice, shall be a material breach of this agreement in whole or in part.

CONTRACT FOR DEMOLITION SERVICES

THIS CONTRACT, made and entered into on the date executed by all parties by and between the CITY OF WILMINGTON, NORTH CAROLINA, a Municipal Corporation located in New Hanover County (hereinafter called "CITY"), and \_\_\_\_\_, a corporation organized under the laws of the State of \_\_\_\_\_; (hereinafter called "CONTRACTOR").

W I T N E S S E T H:

1. Purpose. The CITY hereby employs the CONTRACTOR to furnish all labor, materials and equipment to perform all work in manner and form as specified by the attached plans, specifications and documents consisting of, but not limited to: Proposal, Contract, any plans or drawings which are made a part hereof as if fully contained herein for the demolition of the structures which are incorporated as if fully set out, for the following:  
  

**Riverfront-Riverwalk Best Western Pier Demo** as specified herein and on the plans, specifications, contract documents, drawings, addenda and change orders (if any).
2. Term of Contract/Liquidated Damages. The CONTRACTOR shall commence demolition activities to be performed under this contract within **forty-five (45) days** of receipt of a written Notice to Proceed from the Purchasing Manager and shall complete all work hereunder within **ninety (90) calendar days** of the date of beginning. The CONTRACTOR further agrees to pay, as liquidated damages, the sum of **\$250.00** for each consecutive calendar day thereafter.
3. Permits. CONTRACTOR shall obtain the required permits prior to commencing work.
4. Notification of Commencement of Work. The utility companies shall be notified by CONTRACTOR to check as to the location of any underground services on the site, and a proper disposition made prior to commencement of work. The CONTRACTOR shall notify electric, water, natural gas, telephone, cable, and other utilities as necessary to disconnect any service and remove any meters and lines from the buildings.

5. Safety Requirements. CONTRACTOR shall secure the area around the buildings by use of signs, barricades, and personnel to assure that only authorized personnel will be on the site from the time of the beginning until completion. CONTRACTOR shall not leave any part of the structure in a hazardous condition overnight or at any time. In addition, CONTRACTOR shall abide by all rules and regulations of the Department of Labor, Occupational Safety and Health Administration.
6. Removal of Debris. All debris of all descriptions shall be removed completely, including all materials above ground, all wood, electrical, plumbing, and rubbish shall be removed from the premises and disposed of by the CONTRACTOR except as outlined in the Scope of Work. All landfill fees or disposal fees of any kind shall be paid by the Contractor. All materials shall be disposed of in accordance with applicable state and federal law. Disposal by land filling shall be at a landfill that has obtained all permits as required by North Carolina law. The entire site shall also be cleared of any debris, trash, or other waste material. The CONTRACTOR shall leave the site clean and free of all debris whether the debris is associated with the demolition or not. Live trees shall not be damaged or removed as part of the demolition.
7. Removal of Hazardous Materials. Removal and disposal of any hazardous materials, such as asbestos and lead paint, must be handled in accordance with established Federal, State, and Local regulations. Asbestos removal must be performed in accordance with OSHA asbestos regulations, 29 CFR 1910 & 1926, and NESHAP asbestos regulations 40 CFR 61, subpart M, and any other applicable Federal, State, and Local regulations. North Carolina regulations require the accreditation of personnel who work in the asbestos field and notification and permitting fees for asbestos removal projects such as the CONTRACTOR must utilize an accredited firm for the removal and disposal of all asbestos materials. Hazardous materials shall be disposed of at the County landfill or other site approved for the disposal of such materials as approved by the EPA.
8. Salvage and Historic Architectural Components. Any materials that the CONTRACTOR considers to be of value will become the property of the CONTRACTOR, with the exceptions noted herein and in the Scope of Work. CONTRACTOR shall make all reasonable efforts to preserve historic architectural components for sale or donation. The CONTRACTOR shall not sell, give away, or otherwise distribute any hazardous material, including, but not limited to, wood coated with lead-based paint and chemicals.
9. Grading of Site. All impervious surfaces are to remain. Contractor shall take care to not to significantly damage the concrete, asphalt and other impervious surfaces on site during demolition. No wood or other construction debris will be allowed in any fill material used. The fill area of the site shall be seeded with an approved grass seed and straw shall be spread over the area after the completion of demolition.

10. Extra Work. In the event extra work is necessary, not set forth or contemplated in this contract, the CONTRACTOR agrees to faithfully perform all such work under a written change order from the CITY, setting forth and describing fully the work to be done, payment terms, and additional time to complete demolition, if appropriate.
11. Compensation. The CITY hereby agrees to pay to CONTRACTOR the amount not to exceed \_\_\_\_\_ dollars (\$ \_\_\_\_\_) for services as provided herein. Payment will be made within thirty (30) days after receipt of an approved invoice.
12. Insurance.

- a. **COMMERCIAL GENERAL LIABILITY:** CONTRACTOR shall maintain Commercial General Liability (CGL) that provides coverage for Demolition Liability and if necessary, Commercial Umbrella Liability insurance with a total limit of not less than \$3,000,000 each occurrence for bodily injury and property damage. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/ location or the general aggregate shall be twice the required limit. CGL insurance shall be written on Insurance Services Office (ISO) "occurrence" form CG 00 01 covering Commercial General Liability or its equivalent and shall cover the liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract). Insurance shall be on an occurrence basis and shall protect the CONTRACTOR against liability arising from his operations, operations by subcontractors, elevators, products, completed operations, and contractual liability assumed under the indemnity provisions of this contract. XCU exclusions must be deleted when applicable to operations performed by CONTRACTOR or his subcontractors.

The City of Wilmington, its officers, officials, agents, and employees are to be covered as additional insureds under the CGL by endorsement CG 20 10 or CG 20 33 AND CG 20 37 or an endorsement providing equivalent coverage as respects to liability arising out of activities performed by or on behalf of the contractor; products and completed operations of the contractor; premises owned, leased or used by the contractor; and under the commercial umbrella, if any. The coverage shall contain no special limitations on the scope of protection afforded to the City of Wilmington, its officers, officials, agents, and employees.

There shall be no endorsement or modification of the CGL or Umbrella Liability limiting the scope of coverage for liability arising from explosion, collapse, underground property damage, or damage to the named insured's work, when those exposures exist.

The insurer shall agree to waive all rights of subrogation against the City of Wilmington, its officers, officials, agents and employees for losses arising from work performed by the contractor for the City of Wilmington.

b. **WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY:** Contractor shall maintain Workers' Compensation as required by the general statutes of the State of North Carolina and Employer's Liability Insurance. The Employer's Liability, and if necessary, Commercial Umbrella Liability insurance shall not be less than \$53,000,000 each accident for bodily injury by accident, \$3,000,000 each employee for bodily injury by disease, and \$3,000,000 policy limit.

The insurer shall agree to waive all rights of subrogation against the City of Wilmington, its officers, officials, agents and employees for losses arising from work performed by the contractor for the City of Wilmington.

The U.S. Longshoremen and Harbor Workers' Compensation Act endorsement shall be attached to the policy when the services will be on or in close proximity to navigable waterways. The Maritime Coverage endorsement (WC 00 02 01) shall be attached to the policy when the contracted services involve the use of watercraft.

c. **BUSINESS AUTO LIABILITY:** Contractor shall maintain Business Auto Liability and, if necessary, Commercial Umbrella Liability insurance with a limit of not less than \$3,000,000 each accident. Such insurance shall cover liability arising out of any auto, including owned, hired, and non-owned autos. Business Auto coverage shall be written on ISO form CA 00 01, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in ISO form CA 00 01. Pollution liability coverage equivalent to that provided under the ISO pollution liability-broadened coverage for covered autos endorsement (CA 99 48) shall be provided, and the Motor Carrier Act endorsement (MCS 90) shall be attached when those exposures exist.

Contractor waives all rights against the City of Wilmington, its officers, officials, agents and employees for recovery of damages to the extent these damage are covered by the business auto liability or commercial umbrella liability insurance obtained by Contractor.

The contractor's Business Auto Liability insurance shall be primary as respects the City of Wilmington, its officers, officials, agents, and employees. Any other insurance or self-insurance maintained by the City of Wilmington, its officers, officials, and employees shall be excess of and not contribute with the contractor's insurance.

13. Guarantee. CONTRACTOR hereby agrees to guarantee, for a period of one year after date of final payment, the work accomplished under this Contract. CONTRACTOR agrees to repair at no cost to the CITY any defects due to faulty workmanship or materials which may appear in his work during this period.
  
14. Release and Indemnity. To the fullest extent permitted by law, the CONTRACTOR shall release, indemnify, keep and save harmless the CITY, its agents, officials and employees, from any and all responsibility or liability for any and all damage or injury of any kind or nature whatever (including death resulting therefrom) to all persons, whether agents, officials or employees of the CITY or third persons, and to all property proximately caused by, incident to, resulting from, arising out of, or occurring in connection with, directly or indirectly, the performance or nonperformance by CONTRACTOR (or by any person acting for the CONTRACTOR or for whom the CONTRACTOR is or is alleged to be in any way responsible), whether such claim may be based in whole or in part upon contract, tort (including alleged active or passive negligence or participation in the wrong), or upon any alleged breach of any duty or obligation on the part of the CONTRACTOR, its agents, officials and employees or otherwise. The provisions of this Section shall include any claims for equitable relief or for damages (compensatory or punitive) against the CITY, its agents, officials, and employees including alleged injury to the business of any claimant and shall include any and all losses, damages, injuries, settlements, judgments, decrees, awards, fines, penalties, claims, costs and expenses. Expenses as used herein shall include without limitation the costs incurred by the CITY, its agents, officials and employees, in connection with investigating any claim or defending any action, and shall also include reasonable attorneys' fees by reason of the assertion of any such claim against the CITY, its agents, officials or employees. The CONTRACTOR expressly understands and agrees that any performance bond or insurance protection required by this agreement, or otherwise provided by the CONTRACTOR, shall in no way limit the CONTRACTOR'S responsibility to release, indemnify, keep and save harmless and defend the CITY as herein provided. The intention of the parties is to apply and construe broadly in favor of the CITY the foregoing provisions subject to the limitations, if any, set forth in N.C.G.S. § 22B-1.

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15. Personnel. It is mutually agreed that CONTRACTOR is an independent contractor and not an agent of the CITY, and as such the CONTRACTOR shall not be entitled to any CITY employment benefits, such as, but not limited to, vacation, sick leave, insurance, workmen's compensation, or pension and retirement benefits.
16. Conflict of Interest. No paid employee of the CITY shall have a personal or financial interest, direct or indirect, as a contracting party or otherwise, in the performance of this agreement.
17. Non-Waiver of Rights. It is agreed that the CITY'S failure to insist upon the strict performance of any provision of this agreement, or to exercise any right based upon a breach thereof, or the acceptance of any performance during such breach, shall not constitute a waiver of any rights under this agreement.
18. Suspension or Termination of Agreement
  - a. In the event that review of CONTRACTOR's performance shows non-conformance to the attached scope of service or other terms or conditions contained herein as a result of the CONTRACTOR's errors, omissions, or negligent acts, the CONTRACTOR shall be in breach of this contract and the CITY may take corrective action as it deems necessary including, but not limited to, withholding or reduction of payment.
  - b. CITY shall also have the right to suspend this contract upon written notice to the CONTRACTOR. Such suspension may be made for any of the following reasons: (i) violations or non-compliance with the contract terms, (ii) violations of OSHA laws or regulations, (iii) violations of Federal or State environmental and health laws or regulations, (iv) operating CITY valves without permission, (v) moving CITY supplied water meters without permission, (vi) failure to adequately plan for the protection of underground utilities during construction, (vii) violation of any CITY ordinances or regulations, or (viii) verbal abuse of any CITY employees or others. In addition, any such violations may result in the CONTRACTOR being disqualified from bidding on future CITY projects. The written notice of suspension shall state the reasons for suspension and allow for a review period of ten (10) days during which the CONTRACTOR shall be provided with an opportunity to respond with an explanation or a justification, and/or shall undertake any reasonable remedial action required by the CITY. If, in the opinion of the CITY, the CONTRACTOR has not addressed the reasons for suspension at the completion of the ten (10) day suspension period, the CITY shall have a right to terminate this contract whereupon all obligations of the CITY to the CONTRACTOR shall cease.
  - c. CITY may, at any time, terminate this contract for the convenience and without cause. Upon receipt of written notice from the CITY of such termination, CONTRACTOR shall (i) cease operations as directed by CITY in the notice; (ii) take actions necessary,

or that the CITY may direct, for the protection and preservation of the work; and (iii) except for work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing sub-contracts and purchase orders and enter into no further sub-contracts and purchase orders. CONTRACTOR shall be paid for services performed to the date of termination and costs incurred by reason of such termination, but such costs shall not include anticipated profit on unperformed work. In no event will the amount due CONTRACTOR in the event of termination for convenience exceed that amount set forth in Paragraph 11 of this contract.

- d. Nothing contained herein shall prevent the CITY from pursuing any other remedy which it may have against the CONTRACTOR, including claims for damages.
19. Contract Disputes. In accordance with N.C.G.S. § 143-128.1(8) the parties agree to mediate contract disputes in excess of \$15,000.00. Within ten (10) days of such contract disputes, the parties shall select a mediator that is certified pursuant to all of the parties involved in the dispute. If the parties cannot agree on a mediator or do not timely select a mediator, the CITY shall select the mediator. The parties and the mediator shall agree upon the mediator's rate of compensation. The parties to the dispute shall share in the payment of the mediator's compensation with the CITY paying a minimum of one-third of the compensation if the CITY is a party to the dispute.
20. Assignment. No party shall sell or assign any interest in or obligation under this Agreement without the prior express written consent of all the parties, such consent shall not be unreasonably withheld. Provided, however, that this Agreement may be assigned by the Company to a wholly owned subsidiary of the Company, without the consent of all other parties, provided that the Company will guarantee the performance by the Subsidiary of the obligations due under this Agreement.
21. Subcontracts. The CONTRACTOR shall utilize no subcontracts for carrying out the services to be performed under this agreement without the written approval of the CITY.
22. Entire Agreement. This Agreement, including any Exhibits attached, which are incorporated herein and made a part hereof, constitutes the entire contract between the parties, and no warranties, inducements, considerations, promises or other inferences shall be implied or impressed upon this agreement that are not set forth herein. This Agreement shall not be altered or amended except in writing signed by all Parties.
23. Binding Effect. The agreement shall be binding upon the heirs, successors, assigns, agents, officials, employees, independent contractors, and subcontractors of the parties.
24. Continuing Obligation. The parties will make and execute all further instruments and documents required to carry out the purposes and intent of the agreement.



25. Reference. Use of the masculine includes feminine and neuter, singular includes plural; and captions and headings are inserted for convenience of reference and do not define, describe, extend or limit the scope of intent of the agreement.
26. Interpretation. All of the terms and conditions contained herein shall be interpreted in accordance with the laws of the State of North Carolina. In the event of a conflict between the various terms and conditions contained herein or between these terms and other applicable provisions, then the more particular shall prevail over the general and the more stringent or higher standard shall prevail over the less stringent or lower standard.
27. Saving Clause. If any section, subsection, paragraph, sentence, clause, phrase or portion of this contract is for any reason held invalid, unlawful, or unconstitutional by any court of competent jurisdiction, such portion shall be deemed severable and such holding shall not affect the validity of the remaining portions hereof.
28. Other Laws and Regulations. CONTRACTOR will comply with any and all applicable federal, state and local standards, regulations, laws, statutes and ordinances including those regarding toxic, hazardous and solid wastes and any pollutants; public and private nuisances; health or safety; and zoning, subdivision or other land use controls. CONTRACTOR will take all reasonably necessary, proper or required safety, preventative and remedial measures in accordance with any and all relations and directives from the North Carolina Department of Human Resources, the United States Environmental Protection Agency, the North Carolina Department of Environmental Quality, Health Departments, and any other federal, state or local agency having jurisdiction, to insure the prompt prevention or cessation (now or in the future) of violations of either the applicable provisions of such standards, regulations, laws, statutes, and ordinances or any permits or conditions issued thereunder. CONTRACTOR specifically acknowledges and agrees that CONTRACTOR, and any subcontractors it uses, has complied with and shall continue to comply with the provisions of the federal E-Verify program in compliance with Article 2 of Chapter 64 of the North Carolina General Statutes. CONTRACTOR shall maintain adequate safeguards with respect to sensitive customer information in conformance with and pursuant to 16 C.F.R. § 681.1 and in accordance with N.C.G.S. § 132-1.10 and § 75-65.
29. Interpretation/Governing Law. All of the terms and conditions contained herein shall be interpreted in accordance with the laws of the State of North Carolina without regard to any conflicts of law principles and subject to the exclusive jurisdiction of federal or state courts within the State of North Carolina. In the event of a conflict between the various terms and conditions contained herein or between these terms and other applicable provisions, then the more particular shall prevail over the general and the more stringent or higher standard shall prevail over the less stringent or lower standard. The place of this Agreement, its situs and forum, shall be Wilmington, New Hanover County, North Carolina, and in said County and State shall all matters, whether sounding in contract or tort relating to the validity, construction, interpretation, or enforcement of this Agreement be determined.

30. Non-Discrimination. CONTRACTOR will take affirmative action not to discriminate against any employee or applicant for employment or otherwise illegally deny any person participation in or the benefits of the program which is the subject of this agreement because of race, creed, color, sex, age, disability or national origin. To the extent applicable, CONTRACTOR will comply with all provisions of Executive Order No. 11246, the Civil Rights Act of 1964, (P.L. 88-352) and 1968 (P.L. 90-284), and all applicable federal, state and local laws, ordinances, rules, regulations, orders, instructions, designations and other directives promulgated to prohibit discrimination. Violation of this provision, after notice, shall be a material breach of this agreement and may result, at CITY'S option, in a termination or suspension of this agreement in whole or in part.
31. Authority to Act. Each of the persons executing this Agreement on behalf of CONTRACTOR does hereby covenant, warrant and represent that the CONTRACTOR is a duly organized and validly existing legal entity authorized to transact business within the State of North Carolina, that the CONTRACTOR has full right and authority to enter into this Agreement, and that each and all persons signing on behalf of the CONTRACTOR were authorized to do so.
32. Counterparts. This Agreement may be executed in several counterparts, including separate counterparts. Each shall be an original, but all of them together constitute the same instrument.

IN WITNESS WHEREOF, the CITY has caused this agreement to be duly executed in its name and behalf and the CONTRACTOR has caused this agreement to be duly executed in its name and behalf and its corporate seal to be hereunto affixed, and attested to.

CITY OF WILMINGTON, NORTH CAROLINA

BY: \_\_\_\_\_  
Anthony N. Caudle, City Manager

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

WITNESS:

\_\_\_\_\_  
Daryle L. Parker, Purchasing Manager

APPROVED AS TO FORM:

\_\_\_\_\_  
Gina Essey, Assistant City Attorney

FINANCE OFFICER'S CERTIFICATION STATEMENT

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act this the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Jennifer R. Maready, Director of Finance

Project String: \_\_\_\_\_  
Org & Obj Number: \_\_\_\_\_  
Amount of Contract: \_\_\_\_\_  
Req. No.: \_\_\_\_\_  
Federal ID Number: 56-6000239

COMPANY

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public, in said State and County, do hereby certify that, \_\_\_\_\_ personally appeared before me this day and acknowledged that he (she) is the \_\_\_\_\_ of \_\_\_\_\_ and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and official seal, this the \_\_\_\_\_ day of \_\_\_\_\_, 2024

\_\_\_\_\_  
Notary Public

[SEAL}

My Commission expires: \_\_\_\_\_

INSURANCE CERTIFICATES

**(Staple Insurance Certificates as required in the contract to this sheet)**

***CITY OF WILMINGTON***  
**DEMOLITION**

PROPOSAL NAME: Riverfront-Riverwalk Best Western Pier Demo

CONTRACT NO. DEMO-0624

SUBMIT BIDS TO: CHRISTINE R. KAREM,  
SR. CONTRACT SPECIALIST  
P.O. BOX 1810  
929 N FRONT STREET 10<sup>TH</sup> FLOOR  
WILMINGTON, NC 28402-1810

COMPANY NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_



BEST WESTERN PIER

**PROPOSAL SHEET**  
**Riverfront-Riverwalk Best Western Pier**

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

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

**Telephone:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Representative:** \_\_\_\_\_

**Title:** \_\_\_\_\_

Potential bidders should attend a Pre-Bid meeting at 929 North Front Street, Room 154B, Wilmington, NC on **June, 13, 2024, @ 10:00 AM** to review and to better understand the nature of this work.

The City has the right to reject any and all bids.

**Bids are due by 3:00 PM on Thursday, June 27, 2024.**

Submitted, this the \_\_\_\_\_ day of \_\_\_\_\_ 2024.

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

Signed by: \_\_\_\_\_ Title: \_\_\_\_\_

Total Bid amount, including all aspects of the demolition, removal of concrete, debris, asbestos and other items referenced in the bid document.

\$ \_\_\_\_\_

Completion time (Calendar days) \_\_\_\_\_ (Not to exceed 90 days)

**BIDDERS ARE ADVISED TO CAREFULLY REVIEW ALL DOCUMENTS ATTACHED**

If awarded, demolition must be coordinated with the Project Manager, Anthony Geathers at [anthony.geathers@wilmingtonnc.gov](mailto:anthony.geathers@wilmingtonnc.gov), (910) 341-5889. The contractor must contact the Project Manager prior to beginning demolition.

The undersigned acknowledges receipt of any issued Addendum's to this Project by recording the Addendum number and date acknowledged below:

Addendum #1: \_\_\_\_\_ Dated: \_\_\_\_\_

Addendum #2: \_\_\_\_\_ Dated: \_\_\_\_\_

Addendum #3: \_\_\_\_\_ Dated: \_\_\_\_\_



# BEST WESTERN PIER DEMOLITION

Technical Specifications

JUNE 29, 2023



ORIGINAL

**SUBMITTED BY**  
Dewberry Engineers Inc.  
295 Bendix Road, Suite 100  
Virginia Beach, VA 23452  
703.849.0127

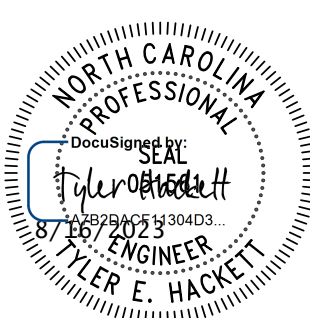
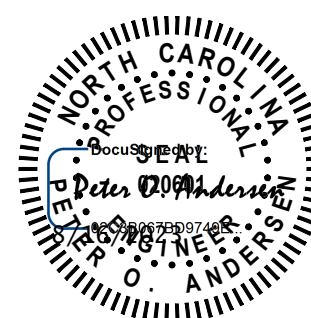
**SUBMITTED TO**  
City of Wilmington  
P.O. Box 1810  
Wilmington, NC 28402



Best Western Pier Demolition

# Technical Specifications

000000	SPECIFICATION COVER AND TOC
010000	SUMMARY
012200	PAYMENT PROCEDURES
012900	PROJECT MANAGEMENT AND COORDINATION
013100	CONSTRUCTION PROGRESS DOCUMENTATION
013300	SUBMITTAL PROCEDURES
013500	SPECIAL PROJECT PROCEDURES
017000	MOBILIZATION AND DEMOBILIZATION
017700	CLOSEOUT PROCEDURES
024116	STRUCTURE DEMOLITION
024119	SELECTIVE DEMOLITION
033000	CAST IN PLACE CONCRETE
260100	BASIC ELECTRICAL REQUIREMENTS
260500	BASIC ELECTRICAL MATERIALS AND METHODS
311010	EROSION AND SEDIMENT CONTROL
312000	EARTH MOVING

Civil	Electrical
Engineer of Record: Tyler E. Hackett, P.E.	Engineer of Record: Peter O. Andersen
	
010000, 012200, 012900, 013100, 013300, 013500, 017000, 017700, 024116, 024119, 033000, 311010, 312000	260100, 260500

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Project information.
- 2. Work covered by Contract Documents.
- 3. Contractor's use of site and premises.
- 4. Coordination with occupants.
- 5. Work restrictions.
- 6. Specification and Drawing conventions.
- 7. Miscellaneous provisions.

B. Related Requirements:

- 1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 DEFINITIONS

- A. Work Package: A group of specifications, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.

1.4 PROJECT INFORMATION

A. Project Identification: Best Western Pier Demolition

- 1. Project Location: Wilmington, NC

B. Owner: Best Western

- 1. Owner's Representative: Anthony Caudle

C. Engineer: Dewberry Engineers Inc.

- 1. Engineer's Representative: Bryan Lambeth, P.E. and Tyler Hackett, P.E.

## 1.5 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:
  - 1. This project is to remove the existing deteriorated pier in Wilmington, NC which is connected to the Best Western Plus Coastline Inn by way of the second story exit. The Timber and Steel pier will be selectively demolished in order to be fully removed while limiting disturbance to the adjacent properties. No demolition is to occur on the Riverwalk. This project primarily includes the demolition of the pier but also includes sitework required to return the property to usable conditions. This additional site work includes the forming and pouring of a concrete walkway, filling of earthen holes left by the piles being removed, and replacement of select decking on the riverwalk. The pier is currently serviced with electrical power for lighting and receptacle. This project includes the removal of this electrical service per the project drawings.
- B. Type of Contract:
  - 1. Project will be constructed under a single prime contract.

## 1.6 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Unrestricted Use of Site: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.

## 1.7 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
  - 1. The CONTRACTOR shall be allowed to work during daylight hours with no restrictions on days until the project is complete. Estimated completion date is November 17, 2023.
  - 2. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction. Work hours are to be coordinated with the Best Western Inn.
  - 1. Weekend Hours: No restriction
  - 2. Early Morning Hours: No restriction, coordinate with property owner
- C. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to occupancy with Owner.

## 1.8 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
  2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.
  3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.
  4. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.
- C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- D. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
  2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings and published as part of the U.S. National CAD Standard.
  3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

## 1.9 MISCELLANEOUS PROVISIONS

- A. Hurricane Preparedness Plan.
1. Within 20 days of the date of Notice to Proceed, the CONTRACTOR shall submit to the PROJECT REPRESENTATIVE a Hurricane Preparedness Plan. The plan shall outline the necessary measures which the CONTRACTOR proposes to perform at no additional cost to the OWNER in case of a hurricane warning or a severe northeastern storm otherwise known as a 'Nor-Easter'. Such measures shall be in accordance with local and state requirements.
  2. In the event of inclement weather, the CONTRACTOR will, and will cause Subcontractors to, protect carefully the Work and materials against damage or injury

from the weather. If, in the opinion of PROJECT REPRESENTATIVE, any portion of Work or materials are damaged or injured by reason of failure on the part of the CONTRACTOR or Subcontractors to so protect the Work, such Work and materials shall be removed and replaced at the expense of CONTRACTOR.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012900 – PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
  - 1. Section 013200 "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
  - 1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
  - 2. Submit the schedule of values to Engineer at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments, as certified by Engineer and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the Owner/Contractor Agreement. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.

- C. Application for Payment Forms: Use EJCDC Document C-620 as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Engineer will return incomplete applications without action.
1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
  2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
  3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
  4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
  2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  3. Provide summary documentation for stored materials indicating the following:
    - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
    - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- F. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Engineer by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  2. When an application shows completion of an item, submit conditional final or full waivers.

3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
  4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
  5. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
  2. Schedule of values.
  3. Contractor's construction schedule (preliminary if not final).
  4. Schedule of unit prices.
  5. Submittal schedule (preliminary if not final).
  6. Initial progress report.
  7. Certificates of insurance and insurance policies.
  8. Performance and payment bonds.
- I. Application for Payment at Substantial Completion: After Engineer issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
    - a. Complete administrative actions, submittals, and Work preceding this application, as described in Section 017700 "Closeout Procedures."
  2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
  2. Certification of completion of final punch list items.
  3. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  4. Updated final statement, accounting for final changes to the Contract Sum.
  5. Evidence that claims have been settled.
  6. Final liquidated damages settlement statement.
  7. Proof that taxes, fees, and similar obligations are paid.
  8. Waivers and releases.



Best Western Pier Demolition

June 2023

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

## SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
  - 1. Startup construction schedule.
  - 2. Contractor's Construction Schedule.
  - 3. Construction schedule updating reports.
  - 4. Daily construction reports.
  - 5. Material location reports.
  - 6. Site condition reports.
  - 7. Unusual event reports.
- B. Related Requirements:
  - 1. Section 012900 "Payment Procedures" for schedule of values and requirements for use of cost-loaded schedule for Applications for Payment.

## 1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction Project. Activities included in a construction schedule consume time and resources.
  - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
  - 2. Predecessor Activity: An activity that precedes another activity in the network.
  - 3. Successor Activity: An activity that follows another activity in the network.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
  - 1. Working electronic copy of schedule file.
  - 2. PDF file.
- B. Startup construction schedule.

1. Submittal of cost-loaded startup construction schedule will not constitute approval of schedule of values for cost-loaded activities.

#### 1.5 COORDINATION

- A. Coordinate Contractor's Construction Schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
  1. Secure time commitments for performing critical elements of the Work from entities involved.
  2. Coordinate each construction activity in the network with other activities, and schedule them in proper sequence.

#### 1.6 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.
  1. Use Microsoft Projects for current Windows operating system.
- B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.
  1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
  2. Procurement Activities: Include procurement process activities for the following long lead-time items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
    - a. Barge
    - b. Demolition Crane
    - c. Electrician
  3. Submittal Review Time: Include review and resubmittal times indicated in Section 013300 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with submittal schedule.
  4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for Engineer's administrative procedures necessary for certification of Substantial Completion.
  5. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and Final Completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.

1. Phasing: Arrange list of activities on schedule by phase.
2. Work under More Than One Contract: Include a separate activity for each contract.
3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
4. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
5. Owner-Furnished Products: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
6. Work Restrictions: Show the effect of the following items on the schedule:
  - a. Coordination with existing construction.
  - b. Limitations of continued occupancies.
  - c. Uninterruptible services.
  - d. Partial occupancy before Substantial Completion.
  - e. Use-of-premises restrictions.
  - f. Provisions for future construction.
  - g. Seasonal variations.
  - h. Environmental control.
7. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
  - a. Subcontract awards.
  - b. Submittals.
  - c. Purchases.
  - d. Mockups.
  - e. Fabrication.
  - f. Sample testing.
  - g. Deliveries.
  - h. Installation.
  - i. Tests and inspections.
  - j. Adjusting.
  - k. Curing.
  - l. Building flush-out.
  - m. Startup and placement into final use and operation.
  - n. Commissioning.
8. Construction Areas: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
  - a. Structural completion.
  - b. Temporary enclosure and space conditioning.
  - c. Permanent space enclosure.
  - d. Completion of mechanical installation.
  - e. Completion of electrical installation.
  - f. Substantial Completion.

- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion, and the following interim milestones:
1. Temporary enclosure and space conditioning.
- E. Cost Correlation: Superimpose a cost correlation timeline, indicating planned and actual costs. On the line, show planned and actual dollar volume of the Work performed as of planned and actual dates used for preparation of payment requests.
1. See Section 012900 "Payment Procedures" for cost reporting and payment procedures.
- F. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
1. Unresolved issues.
  2. Unanswered Requests for Information.
  3. Rejected or unreturned submittals.
  4. Notations on returned submittals.
  5. Pending modifications affecting the Work and the Contract Time.
- G. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
  2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  3. As the Work progresses, indicate Final Completion percentage for each activity.
- H. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, equipment required to achieve compliance, and date by which recovery will be accomplished.
- I. Distribution: Distribute copies of approved schedule to Engineer Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
  2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

### 1.7 STARTUP CONSTRUCTION SCHEDULE

- A. Gantt-Chart Schedule: Submit startup, horizontal, Gantt-chart-type construction schedule within seven days of date established for the Notice to Proceed.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first 90 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

### 1.8 GANTT-CHART SCHEDULE REQUIREMENTS

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's Construction Schedule within 30 days of date established for the Notice of Award.
  - 1. Base schedule on the startup construction schedule and additional information received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
  - 1. For construction activities that require three months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

### 1.9 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
  - 1. List of subcontractors at Project site.
  - 2. List of separate contractors at Project site.
  - 3. Approximate count of personnel at Project site.
  - 4. Equipment at Project site.
  - 5. Material deliveries.
  - 6. High and low temperatures and general weather conditions, including presence of rain or snow.
  - 7. Testing and inspection.
  - 8. Accidents.
  - 9. Meetings and significant decisions.
  - 10. Unusual events.
  - 11. Stoppages, delays, shortages, and losses.
  - 12. Meter readings and similar recordings.
  - 13. Emergency procedures.
  - 14. Orders and requests of authorities having jurisdiction.
  - 15. Change Orders received and implemented.
  - 16. Work Change Directives received and implemented.
  - 17. Services connected and disconnected.
  - 18. Equipment or system tests and startups.
  - 19. Partial completions and occupancies.

20. Substantial Completions authorized.

B. Material Location Reports: At weekly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site. Indicate the following categories for stored materials:

1. Material stored prior to previous report and remaining in storage.
2. Material stored prior to previous report and since removed from storage and installed.
3. Material stored following previous report and remaining in storage.

C. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

Unusual Event Reports: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, responses by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

1. Submit unusual event reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013200

## SECTION 013300 – SUBMITTAL PROCEDURES

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Submittal schedule requirements.
2. Administrative and procedural requirements for submittals.

## B. Related Requirements:

1. Section 012900 "Payment Procedures" for submitting Applications for Payment and the schedule of values.
2. Section 013200 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
3. Section 017700 "Closeout Procedures" for submitting closeout submittals and maintenance material submittals.

## 1.2 DEFINITIONS

- A. Informational Submittals: Written and graphic information and physical samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

## 1.3 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Engineer and additional time for handling and reviewing submittals required by those corrections.

1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
2. Initial Submittal Schedule: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
3. Final Submittal Schedule: Submit concurrently with the first complete submittal of Contractor's construction schedule.
  - a. Submit revised submittal schedule as required to reflect changes in current status and timing for submittals.



4. Format: Arrange the following information in a tabular format:
  - a. Scheduled date for first submittal.
  - b. Specification Section number and title.
  - c. Submittal Category: Action; informational.
  - d. Name of subcontractor.
  - e. Description of the Work covered.
  - f. Scheduled date for Engineer's final release or approval.

#### 1.4 SUBMITTAL FORMATS

A. Submittal Information: Include the following information in each submittal:

1. Project name.
2. Date.
3. Name of Engineer.
4. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier and alphanumeric suffix for resubmittals.
5. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
6. Signature of transmitter.

B. Options: Identify options requiring selection by Engineer.

C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Engineer on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.

D. Paper Submittals:

1. Place a permanent label or title block on each submittal item for identification; include name of firm or entity that prepared submittal.
2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Engineer.
3. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Engineer will not return copies.

E. Electronic Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.

#### 1.5 SUBMITTAL PROCEDURES

A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineers receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
  2. Note date and content of revision in label or title block, and clearly indicate extent of revision.
  3. Resubmit submittals until they are marked with approval notation from Engineer's action stamp.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Engineer's action stamp.

## 1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
  2. Mark each copy of each submittal to show which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.

- g. Notation of coordination requirements.
      - h. Availability and delivery time information.
  - 4. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams that show factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  - 5. Submit Product Data before Shop Drawings, and before or concurrently with Samples.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
  - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.
    - g. Seal and signature of professional engineer if specified.
- C. Samples: Submit Samples for review of type, color, pattern, and texture for a check of these characteristics with other materials.
  - 1. Transmit Samples that contain multiple, related components, such as accessories together in one submittal package.
  - 2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
    - a. Project name and submittal number.
    - b. Generic description of Sample.
    - c. Product name and name of manufacturer.
    - d. Sample source.
    - e. Number and title of applicable Specification Section.
    - f. Specification paragraph number and generic name of each item.
  - 3. Email Transmittal: Provide PDF transmittal. Include digital image file illustrating Sample characteristics and identification information for record.
  - 4. Paper Transmittal: Include paper transmittal, including complete submittal information indicated.
  - 5. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.

- a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
  - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- D. **Product Schedule:** As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
  1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
  2. Manufacturer and product name, and model number if applicable.
  3. Number and name of room or space.
  4. Location within room or space.
- E. **Qualification Data:** Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of engineers and owners, and other information specified.
- F. **Certificates:**
  1. **Certificates and Certifications Submittals:** Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
  2. **Installer Certificates:** Submit written statements on manufacturer's letterhead, certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
  3. **Manufacturer Certificates:** Submit written statements on manufacturer's letterhead, certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
  4. **Material Certificates:** Submit written statements on manufacturer's letterhead, certifying that material complies with requirements in the Contract Documents.
  5. **Product Certificates:** Submit written statements on manufacturer's letterhead, certifying that product complies with requirements in the Contract Documents.
- G. **Test and Research Reports:**
  1. **Compatibility Test Reports:** Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for substrate preparation and primers required.
  2. **Field Test Reports:** Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
  3. **Material Test Reports:** Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
  4. **Preconstruction Test Reports:** Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed

before installation of product, for compliance with performance requirements in the Contract Documents.

5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - a. Name of evaluation organization.
  - b. Date of evaluation.
  - c. Time period when report is in effect.
  - d. Product and manufacturers' names.
  - e. Description of product.
  - f. Test procedures and results.
  - g. Limitations of use.

#### 1.7 DELEGATED DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
  1. If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to Engineer.
- B. Delegated Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF file and three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
  1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

#### 1.8 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.

#### 1.9 ENGINEER'S REVIEW

- A. Action Submittals: Engineer will review each submittal, indicate corrections or revisions required, and return.

1. PDF Submittals: Engineer will indicate, via markup on each submittal, the appropriate action.
  2. Paper Submittals: Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- B. Informational Submittals: Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Engineer will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Engineer.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Engineer will return without review submittals received from sources other than Contractor.
- F. Submittals not required by the Contract Documents will be returned by Engineer without action.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013300

## SECTION 013500 - SPECIAL PROJECT PROCEDURES

### PART 1 – GENERAL

#### 1.1 HURRICANE PREPAREDNESS PLAN

- A. Within 20 days of the date of Notice to Proceed, the CONTRACTOR shall submit to the PROJECT REPRESENTATIVE a Hurricane Preparedness Plan. The plan shall outline the necessary measures which the CONTRACTOR proposes to perform at no additional cost to the OWNER in case of a hurricane warning. Such measures shall be in accordance with local and state requirements.
- B. In the event of inclement weather, the CONTRACTOR will, and will cause Subcontractors to, protect carefully the Work and materials against damage or injury from the weather. If, in the opinion of PROJECT REPRESENTATIVE, any portion of Work or materials are damaged or injured by reason of failure on the part of the CONTRACTOR or Subcontractors to so protect the Work, such Work and materials shall be removed and replaced at the expense of CONTRACTOR.

#### 1.2 CONSTRUCTION CONDITIONS AND SUBSURFACE INVESTIGATION

- A. The CONTRACTOR shall strictly adhere to the specific requirements of the government unit(s) or agency(ies) having jurisdiction over the Work. Wherever there is a difference in the requirements of a jurisdictional body and these Specifications, the more stringent shall apply.
- B. The CONTRACTOR shall be responsible for having determined, prior to bid submission, the nature and location of the Work, the conformation of the ground, the character and quality of the substrata, the types and quantity of materials to be encountered, the nature of the groundwater conditions, the character of equipment and facilities needed preliminary to and during the prosecution of the Work, the general and local conditions and all other matters which can in any way affect the Work under this Contract. The prices established for the Work to be done will reflect all costs pertaining to the Work. Any claims for extras based on substrata, groundwater table, and other such conditions will not be allowed.

#### 1.3 PUBLIC NUISANCE

- A. The CONTRACTOR shall not create a public nuisance including, but not limited to, encroachment on adjacent lands, flooding of adjacent lands, excessive noise, or odor.
- B. No extra charge may be made for time lost due to work stoppage resulting from the CONTRACTOR's creation of a public nuisance.

#### 1.4 RELOCATIONS

The CONTRACTOR shall be responsible for the relocation of structures, including, but not limited to, light poles, signs, sign poles, fences, piping, conduits and drains that interfere with the positioning of the work as set out on the Drawings. The cost of all such relocations shall be included in the Contract Price.

#### 1.5 USE OF LAYDOWN YARD

- A. The CONTRACTOR must return the status of the designated laydown yard to equal or better condition than at the beginning of the project.

#### 1.6 TURBIDITY CURTAINS

- A. CONTRACTOR shall furnish and install turbidity curtains around the immediate project vicinity per the manufacturer's specifications.
- B. Turbidity curtains shall meet the following requirements:
- a. Visible portion shall be a bright color that will attract the attention of nearby boaters.
  - b. Fabric, connections, cables, and anchors must be of sufficient strength to resist the load imparted by a 2 knot current acting perpendicular to the curtain.
  - c. Sufficient buoyancy must be provided to support the curtain and generate a continuous minimum freeboard of 6 inches.
  - d. Load cables shall be fabricated into the top and bottom hem of every curtain. The cables shall be vinyl coated steel and possess an ultimate capacity of 10,000 pounds. The lower cable shall support ballast of sufficient quantity as to maintain a vertical curtain position.
  - e. Bottom anchors shall be placed fore and aft to resist ebb and flood currents. Bottom anchors must be sufficient to hold the curtain in the same position relative to the bottom of the watercourse without interfering with the action of the curtain. The anchors shall be attached to a floating anchor buoy. The manufacturer's specifications shall be followed when choosing anchor points on the curtain.

#### 1.07 WORK ON PRIVATE PROPERTY

- A. The CONTRACTOR shall maintain construction operations within the presently existing road right-of-way and established easements throughout the Project. In the event that it becomes necessary or advisable to operate beyond the limits of the existing right-of-way, established easements and Right of Entry Agreements, the CONTRACTOR shall be responsible for securing written agreements with the property owners. Immediately after contract award, the CONTRACTOR shall submit to the PROJECT REPRESENTATIVE



a listing of those areas in which it is deemed necessary to work outside of the road right-of-way, easements, or agreements. The listing shall be subject to the approval of the PROJECT REPRESENTATIVE and as construction areas are secured, copies of all written agreements shall be placed on file with the PROJECT REPRESENTATIVE.

- B. The CONTRACTOR shall be responsible for any encroachments on rights-of-way or property of the public or adjoining property owners caused by its operations and shall indemnify, defend and hold the OWNER, ENGINEER and PROJECT REPRESENTATIVE harmless because of any encroachments. In this regard, the CONTRACTOR shall, without extra cost to the OWNER, move any Work or that portion of any Work that encroaches on the property of others, or that is built beyond legal building or setback limits, and the CONTRACTOR shall rebuild the affected Work or portion of Work at the proper location and in full compliance with the Contract Documents.
- C. Before final payment will be authorized, the CONTRACTOR will be required to furnish the OWNER with written releases from property owners or public agencies where side agreements or special easements have been made by the CONTRACTOR or when the CONTRACTOR'S operations, for any reason, have not been kept within the construction right-of-way, easements or Right of Entry Agreements by the OWNER.
- D. In the event written releases required in the above paragraph cannot be secured, the CONTRACTOR shall inform the PROJECT REPRESENTATIVE of the reasons for failure to do so. The PROJECT REPRESENTATIVE in conjunction with the OWNER, will then examine the Site and direct the CONTRACTOR to complete any Work that may be necessary to satisfy the terms of the permit or easement. Should the CONTRACTOR refuse to do the Work, the OWNER reserves the right to have the Work done by separate contract and deduct the cost of same from moneys due the CONTRACTOR, or require the CONTRACTOR to furnish a bond in a sum satisfactory to the OWNER to cover any legal claims for damages. When the PROJECT REPRESENTATIVE is satisfied that the Work has been completed in accordance with the Contract Documents, permits and/or agreements, the OWNER reserves the right to waive the requirement of obtaining the statement if the CONTRACTOR'S failure to obtain such statement is due to the grantor's refusal to sign and this refusal is not based upon any legitimate claims that the CONTRACTOR has failed to fulfill any contract permit or agreement requirements, or if the CONTRACTOR is unable to contact, or has undue hardship in contacting, the grantors.

#### 1.08 DAILY REPORTS

- A. The CONTRACTOR shall submit daily reports of construction activities, including any activities that may occur on non-work days. The report shall include:
  - 1. Weather conditions.
  - 2. Manpower, number of men by craft.
  - 3. Equipment on the project.
  - 4. Major deliveries.

5. Activities work with reference to the CPM schedule activity numbers.
  6. New problems.
  7. Other pertinent information.
- B. A similar report shall be submitted for/by each Subcontractor.
- C. The reports shall be submitted to the PROJECT REPRESENTATIVE within 2 days of the respective report date. Each report shall be signed by the CONTRACTOR'S Superintendent or Project Manager.
- D. Information provided on the daily report shall not constitute notice of delay or any other notice required by the CONTRACT DOCUMENTS. Notice shall be as required therein.

#### 1.09 EMERGENCIES

- A. The CONTRACTOR shall at all times after regular working hours, including weekend and holidays, maintain a telephone where the CONTRACTOR's representative can be reached on an emergency basis. The CONTRACTOR or CONTRACTOR's representative shall be prepared to act to correct conditions on the Site deemed to constitute an emergency by either the OWNER, the PROJECT REPRESENTATIVE, or local authorities and is obligated to act to prevent threatened damage, injury or loss without special instructions from the OWNER, PROJECT REPRESENTATIVE, or ENGINEER. The CONTRACTOR shall give the PROJECT REPRESENTATIVE prompt written notice of all significant changes in the Work or deviations from the Contract Documents caused thereby. If a condition on the Site requires attention after working hours, either the OWNER, PROJECT REPRESENTATIVE, or local authority shall call the CONTRACTOR or representative at the emergency telephone number, identify themselves and describe the emergency condition. The CONTRACTOR is expected to dispatch personnel and equipment to adequately institute corrective measures within 2 hours. If for some reason the CONTRACTOR or representative cannot be reached at the emergency number within two hours, the OWNER shall have the right to immediately initiate corrective measures, and the cost shall be borne by the CONTRACTOR.
- B. In the event that the CONTRACTOR fails to maintain safe job conditions and traffic conditions, including, but not limited to, trench settlement and hazardous storage of backfill or construction materials, the OWNER, after failure of the CONTRACTOR to commence substantial steps at the job site to rectify the situation within 2 hours of the time the CONTRACTOR has been notified of the unsafe condition, may hire guards, take such precautions, make such repairs and take any other steps which the OWNER or the PROJECT REPRESENTATIVE, in their sole discretion, consider necessary to protect the property, persons, or the OWNER. The cost of any of these precautions, guards, or steps shall be deducted from the payments due the CONTRACTOR, and the costs for such services, work and material shall be calculated at prevailing market rates.

#### 1.10 PROPERTY DAMAGES

In the event of any indirect or direct damage to public or private property caused in whole or in part by an act, omission or negligence on the part of the CONTRACTOR, any of its

Subcontractors, any of its Sub-subcontractors or anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable, the CONTRACTOR shall at no additional cost to OWNER promptly remedy and restore such property to a condition equal to or better than that existing before such damage was done. The CONTRACTOR shall perform such restoration by “underpinning”, repairing, rebuilding, replanting, or otherwise restoring as may be required by the PROJECT REPRESENTATIVE, or shall correct such damage in a satisfactory and acceptable manner to the OWNER or the PROJECT REPRESENTATIVE. In case of failure on the part of the CONTRACTOR to promptly restore such property or correct such damage, the OWNER may, upon 5 calendar days written notice, proceed to repair, rebuild or otherwise restore such property as may be necessary and the cost thereof, or a sum sufficient in the judgment of the OWNER to reimburse the owners of the property so damaged, will be deducted from any monies due or to become due the CONTRACTOR under the Contract.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION 013500

## SECTION 017000 - MOBILIZATION/DEMOBILIZATION

## PART 1 - GENERAL

## 1.01 DEFINITION AND SCOPE

As required for the proper performance and completion of the Work, mobilization shall include, but not be limited to, the following principal items:

- A. Move onto the site all CONTRACTOR's plant and equipment required for the first month's operation.
- B. Install temporary construction power, wiring, telephone, and lighting facilities.
- C. Establish a fire protection plan and safety program.
- D. Secure construction water supply.
- E. Provide field office trailers for CONTRACTOR and PROJECT REPRESENTATIVE.
- F. Provide on-site sanitary facilities and potable water facilities.
- G. Arrange for and erect CONTRACTOR'S lay down and storage yard and employee's parking facilities.
- H. Submit all required insurance certificates and bonds.
- I. Obtain all required permits.
- J. Post all OSHA, Department of Labor, and all other required notices.
- K. Have CONTRACTOR'S project manager and/or superintendent at the job site full time.
- L. Submit a detailed construction schedule acceptable to the PROJECT REPRESENTATIVE.
- M. Submit a Schedule of Values of the Work in an approved format acceptable to the PROJECT REPRESENTATIVE.
- N. Submit a hurricane preparedness plan acceptable to the PROJECT REPRESENTATIVE.
- O. Erect all required Project signs.

1.02 PAYMENT FOR MOBILIZATION

Payment for all mobilization/demobilization work will be made at the lump sum price bid for mobilization and demobilization of all labor, equipment, materials and appurtenances necessary for construction of the project. Mobilization shall include all items listed in the above paragraph. Also included, but not limited to, as part of this bid item is the cost for project performance indemnification's, shop drawings, working drawings, schedules, record drawings and documents, coordination, and phasing and other miscellaneous items associated with the work. Measurement and payment for this bid item will be lump sum. The lump sum price for mobilization/demobilization will be limited to 5.0 percent of the total contract amount. Eighty percent (80%) of the lump sum amount will be payable upon mobilization. The remaining 20% will be payable upon demobilization.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION 017000

## SECTION 017700 – CLOSEOUT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, the following:
  - 1. Substantial Completion procedures.
  - 2. Final completion procedures.
  - 3. Warranties.
- B. Related Requirements:
  - 1. Section 012900 "Payment Procedures" for requirements for Applications for Payment for Substantial Completion and Final Completion.
  - 2. Section 013233 "Photographic Documentation" for submitting Final Completion construction photographic documentation.

#### 1.3 DEFINITIONS

- A. List of Incomplete Items: Contractor-prepared list of items to be completed or corrected, prepared for the Engineer's use prior to Engineer's inspection, to determine if the Work is substantially complete.

#### 1.4 ACTION SUBMITTALS

- A. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- B. Certified List of Incomplete Items: Final submittal at Final Completion.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.

## 1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's "punch list"), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Submit closeout submittals specified in other Division 01 Sections, including Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
  - 2. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 5 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Advise Owner of pending insurance changeover requirements.
  - 2. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 5 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.
  - 1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for Final Completion.

## 1.7 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining Final Completion, complete the following:
  - 1. Submit a final Application for Payment in accordance with Section 012900 "Payment Procedures."
  - 2. Certified List of Incomplete Items: Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.

3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  4. Submit Final Completion photographic documentation.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 5 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

#### 1.8 LIST OF INCOMPLETE ITEMS

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
1. Organize items applying to each space by major element, including categories for ceilings, individual walls, floors, equipment, and building systems.
  2. Submit list of incomplete items in the following format:
    - a. MS Excel Electronic File: Engineer will return annotated file.
    - b. Or other improved methods by Engineer

#### 1.9 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Engineer for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- C. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
1. Submit on digital media acceptable to Owner.



PART 2 - PRODUCTS

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
    - a. Clean Project site of rubbish, waste material, litter, and other foreign substances.
    - b. Rake grounds that are not planted, mulched, or paved to a smooth, even-textured surface.
    - c. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - d. Leave Project site clean.

END OF SECTION 017700

## SECTION 024116 - STRUCTURE DEMOLITION

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of buildings and structures.
2. Abandoning in-place and removing below-grade construction.
3. Disconnecting, capping or sealing, and removing site utilities.
4. Salvaging items for reuse by Owner.

B. Related Requirements:

1. Section 011000 "Summary" for use of the premises and phasing requirements.
2. Section 013200 "Construction Progress Documentation" for preconstruction photographs taken before building demolition.
3. Section 024119 "Selective Demolition" for partial demolition of buildings, structures, and site improvements.

#### 1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged.

#### 1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
1. Adjacent Buildings: Detail special measures proposed to protect adjacent buildings to remain.
- B. Schedule of Building Demolition Activities: Indicate the following:

1. Detailed sequence of demolition work, with starting and ending dates for each activity.
  2. Temporary interruption of utility services.
  3. Shutoff and capping or re-routing of utility services.
- C. Predemolition Photographs or Video: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by salvage and demolition operations.

#### 1.5 FIELD CONDITIONS

- A. Buildings to be demolished will be vacated and their use discontinued before start of the Work.
- B. Buildings immediately adjacent to demolition area will be occupied. Conduct building demolition so operations of occupied buildings will not be disrupted.
1. Provide not less than 72 hours' notice of activities that will affect operations of adjacent occupied buildings.
  2. Maintain access to existing walkways, exits, and other facilities used by occupants of adjacent buildings.
    - a. Do not close or obstruct walkways, exits, or other facilities used by occupants of adjacent buildings without written permission from authorities having jurisdiction.
- C. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
1. Hazardous materials will be removed by Owner before start of the Work.
  2. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Engineer and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. On-site storage or sale of removed items or materials is not permitted.

#### 1.6 COORDINATION

- A. Arrange demolition schedule so as not to interfere with Owner's on-site operations.

### PART 2 - PRODUCTS

#### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

- B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

## 2.2 SOIL MATERIALS

- A. Satisfactory Soils: Comply with requirements in Section 312000 "Earth Moving."

## PART 3 - EXECUTION

### 3.1 DEMOLITION CONTRACTOR

- A. Demolition Contractor:

1. The demolition contractor shall have the required experience and knowledge to safely perform the demolition. The contractor shall display experience with marine demolition.

### 3.2 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Inventory and record the condition of items to be removed and salvaged.

### 3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Utilities to Be Disconnected: Locate, identify, disconnect, and seal or cap off utilities serving buildings and structures to be demolished.
  1. Arrange to shut off utilities with utility companies.
  2. If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.
  3. Cut off pipe or conduit a minimum of **[24 inches (610 mm)]** below grade. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.
  4. Do not start demolition work until utility disconnecting and sealing have been completed and verified in writing.

### 3.4 PROTECTION

- A. Existing Facilities: Protect adjacent walkways, loading docks, building entries, and other building facilities during demolition operations. Maintain exits from existing buildings.

- B. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.
  - 1. Strengthen or add new supports when required during progress of demolition.
- C. Existing Utilities to Remain: Maintain utility services to remain and protect from damage during demolition operations.
  - 1. Do not interrupt existing utilities serving adjacent occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction.
  - 2. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and authorities having jurisdiction.
    - a. Provide at least 72 hours' notice to occupants of affected buildings if shutdown of service is required during changeover.
- D. Remove temporary barriers and protections where hazards no longer exist. Where open excavations or other hazardous conditions remain, leave temporary barriers and protections in place.

### 3.5 DEMOLITION, GENERAL

- A. General: Demolish indicated site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
  - 2. Maintain fire watch during and for at least 12 hours after flame-cutting operations.
  - 3. Maintain adequate ventilation when using cutting torches.
  - 4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  - 5. Timber piles shall be removed completely unless otherwise noted in contract drawings, removal may be completed by jetting.
- B. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.
- C. Explosives: Use of explosives is not permitted.

### 3.6 DEMOLITION BY MECHANICAL MEANS

- A. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  - 1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.
- B. Below-Grade Construction: Demolish piles and other below-grade construction.
  - 1. Remove below-grade construction completely or, if indicated, to depths indicated.
- C. Existing Utilities: Remove existing utilities completely or to extend indicated.

### 3.7 SITE RESTORATION

- A. Below-Grade Areas: Completely fill below-grade areas and voids resulting from building demolition operations with satisfactory soil materials according to backfill requirements in Section 312000 "Earth Moving."
- B. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.

### 3.8 REPAIRS

- A. Promptly repair damage to adjacent buildings caused by demolition operations.

### 3.9 DISPOSAL OF DEMOLISHED MATERIALS

- 1. Do not allow demolished materials to accumulate on-site.
- 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- 3. Do not burn demolished materials.

### 3.10 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.
  - 1. Clean roadways and walkways of debris caused by debris transport.

END OF SECTION 024116

## SECTION 024119 - SELECTIVE DEMOLITION

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of selected portions of building or structure.
2. Demolition and removal of selected site elements.
3. Salvage of existing items to be reused or recycled.

B. Related Requirements:

1. Section 011000 "Summary" for restrictions on use of the premises, Owner-occupancy requirements, and phasing requirements.

#### 1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- E. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

#### 1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, and for environmental protection. Indicate proposed locations and construction of barriers.
- B. Schedule of Selective Demolition Activities: Indicate the following:
  - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's on-site operations are uninterrupted.
  - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - 4. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
- C. Predemolition Photographs or Video: Show existing conditions of adjoining construction, including finish surfaces, that might be misconstrued as damage caused by salvage and demolition operations.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Inventory: Submit a list of items that have been removed and salvaged.

#### 1.6 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
  - 1. Before selective demolition, Owner will remove the following items:
    - a. Security Camera, selective electrical connections as indicated in project drawings
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. Hazardous materials will be removed by Owner before start of the Work.
  - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.



1. Maintain fire-protection facilities in service during selective demolition operations.

#### 1.7 COORDINATION

- A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

### PART 2 - PRODUCTS

#### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Verify that hazardous materials have been remediated before proceeding with building demolition operations.
- D. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or video.
  1. Inventory and record the condition of items to be removed and salvaged.
  2. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.

#### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.

1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
2. Arrange to shut off utilities with utility companies.
3. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
4. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.
  - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
  - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
  - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
  - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
  - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.

### 3.3 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
  3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  4. Cover and protect furniture, furnishings, and equipment that have not been removed.
  5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015000 "Temporary Facilities and Controls."
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  1. Strengthen or add new supports when required during progress of selective demolition.
- C. Remove temporary barricades and protections where hazards no longer exist.

### 3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
  3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  5. Maintain fire watch during and for at least 12 hours after flame-cutting operations.
  6. Maintain adequate ventilation when using cutting torches.
  7. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  8. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
  9. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  10. Dispose of demolished items and materials promptly.
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse.
  2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  3. Protect items from damage during transport and storage.
  4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.
- 3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS
- A. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, and then break up and remove.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.

3.7 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

## SECTION 033000 - CAST-IN-PLACE CONCRETE

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Cast-in-place concrete, including concrete materials, mixture design, placement procedures, and finishes.

## B. Related Requirements:

1. Section 031000 "Concrete Forming and Accessories" for form-facing materials, form liners, insulating concrete forms, and waterstops.
2. Section 312000 "Earth Moving" for drainage fill under slabs-on-ground.

## 1.2 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, other pozzolans, and silica fume; materials subject to compliance with requirements.
- B. Water/Cement Ratio (w/cm): The ratio by weight of water to cementitious materials.

## 1.3 PREINSTALLATION MEETINGS

## A. Preinstallation Conference: Conduct conference at Project site.

## 1. Review the following:

- a. Special inspection and testing and inspecting agency procedures for field quality control.
- b. Construction joints, control joints, isolation joints, and joint-filler strips.
- c. Semirigid joint fillers.
- d. Vapor-retarder installation.
- e. Anchor rod and anchorage device installation tolerances.
- f. Cold and hot weather concreting procedures.
- g. Concrete finishes and finishing.
- h. Curing procedures.
- i. Forms and form-removal limitations.
- j. Methods for achieving specified floor and slab flatness and levelness.
- k. Floor and slab flatness and levelness measurements.
- l. Concrete repair procedures.
- m. Concrete protection.
- n. Initial curing and field curing of field test cylinders (ASTM C31/C31M.)
- o. Protection of field cured field test cylinders.

#### 1.4 ACTION SUBMITTALS

##### A. Product Data: For each of the following.

1. Portland cement.
2. Fly ash.
3. Slag cement.
4. Blended hydraulic cement.
5. Silica fume.
6. Performance-based hydraulic cement
7. Aggregates.
8. Admixtures:
  - a. Include limitations of use, including restrictions on cementitious materials, supplementary cementitious materials, air entrainment, aggregates, temperature at time of concrete placement, relative humidity at time of concrete placement, curing conditions, and use of other admixtures.
9. Color pigments.
10. Fiber reinforcement.
11. Vapor retarders.
12. Floor and slab treatments.
13. Liquid floor treatments.
14. Curing materials.
  - a. Include documentation from color pigment manufacturer, indicating that proposed methods of curing are recommended by color pigment manufacturer.
15. Joint fillers.
16. Repair materials.

##### B. Design Mixtures: For each concrete mixture, include the following:

1. Mixture identification.
2. Minimum 28-day compressive strength.
3. Durability exposure class.
4. Maximum w/cm.
5. Calculated equilibrium unit weight, for lightweight concrete.
6. Slump limit.
7. Air content.
8. Nominal maximum aggregate size.
9. Steel-fiber reinforcement content.
10. Synthetic micro-fiber content.
11. Indicate amounts of mixing water to be withheld for later addition at Project site if permitted.

##### C. Shop Drawings:

1. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.

- a. Location of construction joints is subject to approval of the Engineer.
- D. Concrete Schedule: For each location of each Class of concrete indicated in "Concrete Mixtures" Article, including the following:
1. Concrete Class designation.
  2. Location within Project.
  3. Exposure Class designation.
  4. Formed Surface Finish designation and final finish.
  5. Final finish for floors.
  6. Curing process.
  7. Floor treatment if any.

### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For the following:
1. Installer: Include copies of applicable ACI certificates.
  2. Ready-mixed concrete manufacturer.
  3. Testing agency: Include copies of applicable ACI certificates.
- B. Material Certificates: For each of the following, signed by manufacturers:
1. Cementitious materials.
  2. Admixtures.
  3. Fiber reinforcement.
  4. Curing compounds.
  5. Floor and slab treatments.
  6. Bonding agents.
  7. Adhesives.
  8. Vapor retarders.
  9. Semirigid joint filler.
  10. Joint-filler strips.
  11. Repair materials.
- C. Material Test Reports: For the following, from a qualified testing agency:
1. Portland cement.
  2. Fly ash.
  3. Slag cement.
  4. Blended hydraulic cement.
  5. Silica fume.
  6. Performance-based hydraulic cement.
  7. Aggregates.
  8. Admixtures:
    - a. Permeability-Reducing Admixture: Include independent test reports, indicating compliance with specified requirements, including dosage rate used in test.

- D. Floor surface flatness and levelness measurements report, indicating compliance with specified tolerances.
- E. Research Reports:
  - 1. For concrete admixtures in accordance with ICC's Acceptance Criteria AC198.
  - 2. For sheet vapor retarder/termite barrier, showing compliance with ICC AC380.
- F. Preconstruction Test Reports: For each mix design.
- G. Field quality-control reports.
- H. Minutes of preinstallation conference.

#### 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs Project personnel qualified as an ACI-certified Flatwork Technician and Finisher and a supervisor who is a certified ACI Flatwork Concrete Finisher/Technician or an ACI Concrete Flatwork Technician with experience installing and finishing concrete, incorporating permeability-reducing admixtures.
  - 1. Manufacturer certified in accordance with NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- B. Laboratory Testing Agency Qualifications: A testing agency qualified in accordance with ASTM C1077 and ASTM E329 for testing indicated and employing an ACI-certified Concrete Quality Control Technical Manager.

Personnel performing laboratory tests to be an ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician, Grade I. Testing agency laboratory supervisor to be an ACI-certified Concrete Laboratory Testing Technician, Grade II.
- C. Field Quality-Control Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified in accordance with ASTM C1077 and ASTM E329 for testing indicated.
  - 1. Personnel conducting field tests to be qualified as an ACI Concrete Field Testing Technician, Grade 1, in accordance with ACI CPP 610.1 or an equivalent certification program.

#### 1.7 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction testing on each concrete mixture.
  - 1. Include the following information in each test report:
    - a. Admixture dosage rates.
    - b. Slump.



- c. Air content.
- d. Seven-day compressive strength.
- e. 28-day compressive strength.
- f. Permeability.

## 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Comply with ASTM C94/C94M and ACI 301 (ACI 301M).

## 1.9 FIELD CONDITIONS

- A. Cold-Weather Placement: Comply with ACI 301 (ACI 301M) and ACI 306.1 and as follows.

- 1. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
- 2. When average high and low temperature is expected to fall below 40 deg F (4.4 deg C) for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301 (ACI 301M).
- 3. Do not use frozen materials or materials containing ice or snow.
- 4. Do not place concrete in contact with surfaces less than 35 deg F (1.7 deg C), other than reinforcing steel.
- 5. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.

- B. Hot-Weather Placement: Comply with ACI 301 (ACI 301M) and ACI 305.1 (ACI 305.1M), and as follows:

- 1. Maintain concrete temperature at time of discharge to not exceed 95 deg F (35 deg C).
- 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

## 1.10 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to furnish replacement sheet vapor retarder/termite barrier material and accessories for sheet vapor retarder/ termite barrier and accessories that do not comply with requirements or that fail to resist penetration by termites within specified warranty period.

- 1. Warranty Period: 10 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 (ACI 301M) unless modified by requirements in the Contract Documents.

## 2.2 CONCRETE MATERIALS

### A. Source Limitations:

1. Obtain all concrete mixtures from a single ready-mixed concrete manufacturer for entire Project.
2. Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant.
3. Obtain aggregate from single source.
4. Obtain each type of admixture from single source from single manufacturer.
5. Compressive Strength: Not less than **3000 psi (20.6 MPa)** at 28 days when tested in accordance with ASTM C109/C109M.

## 2.3 FLOOR AND SLAB TREATMENTS

- A. Slip-Resistive Emery Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive, crushed emery aggregate containing not less than 50 percent aluminum oxide and not less than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials with 100 percent passing [**3/8-inch (10-mm)**] [**No. 4 (4.75-mm)**] [**No. 8 (2.36-mm)**] <Insert size or gradation> sieve.
- B. Slip-Resistive Aluminum Granule Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive aggregate of not less than 95 percent fused aluminum-oxide granules.
- C. Emery Dry-Shake Floor Hardener: [**Pigmented**] [**Unpigmented**], factory-packaged, dry combination of portland cement, graded emery aggregate, and plasticizing admixture; with emery aggregate consisting of no less than 60 percent of total aggregate content.
- D. Metallic Dry-Shake Floor Hardener: [**Pigmented**] [**Unpigmented**], factory-packaged, dry combination of portland cement, graded metallic aggregate, rust inhibitors, and plasticizing admixture; with metallic aggregate consisting of no less than 65 percent of total aggregate content.
- E. Unpigmented Mineral Dry-Shake Floor Hardener: Factory-packaged dry combination of portland cement, graded quartz aggregate, and plasticizing admixture.
- F. Pigmented Mineral Dry-Shake Floor Hardener: Factory-packaged, dry combination of portland cement, graded quartz aggregate, color pigments, and plasticizing admixture. Use color pigments that are finely ground, nonfading mineral oxides interground with cement.

## 2.4 LIQUID FLOOR TREATMENTS

- A. Penetrating Liquid Floor Treatment: Clear, chemically reactive, waterborne solution of inorganic silicate or silicate materials and proprietary components; odorless; that penetrates, hardens, and densifies concrete surfaces.

## 2.5 REPAIR MATERIALS

- A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch (3 mm) and that can be feathered at edges to match adjacent floor elevations.
1. Cement Binder: ASTM C150/C150M portland cement or hydraulic or blended hydraulic cement, as defined in ASTM C219.
  2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
  3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3 to 6 mm) or coarse sand, as recommended by underlayment manufacturer.
  4. Compressive Strength: Not less than 4100 psi (29 MPa) at 28 days when tested in accordance with ASTM C109/C109M.
- B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch (6 mm) and that can be filled in over a scarified surface to match adjacent floor elevations.
1. Cement Binder: ASTM C150/C150M portland cement or hydraulic or blended hydraulic cement, as defined in ASTM C219.
  2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.
  3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3.2 to 6 mm) or coarse sand as recommended by topping manufacturer.
  4. Compressive Strength: Not less than 3000 psi (20.6 MPa) at 28 days when tested in accordance with ASTM C109/C109M.

## 2.6 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, in accordance with ACI 301 (ACI 301M).
1. Use a qualified testing agency for preparing and reporting proposed mixture designs, based on laboratory trial mixtures.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
1. Fly Ash or Other Pozzolans: 25 percent by mass.
  2. Slag Cement: 50 percent by mass.
  3. Silica Fume: 10 percent by mass.
  4. Total of Fly Ash or Other Pozzolans, Slag Cement, and Silica Fume: 50 percent by mass, with fly ash or pozzolans not exceeding 25 percent by mass and silica fume not exceeding 10 percent by mass.
  5. Total of Fly Ash or Other Pozzolans and Silica Fume: 35 percent by mass with fly ash or pozzolans not exceeding 25 percent by mass and silica fume not exceeding 10 percent by mass.

## 2.7 CONCRETE MIXTURES

1. Minimum Compressive Strength: 3000 psi (20.7 MPa) at 28 days.

## 2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete in accordance with ASTM C94/C94M and furnish batch ticket information.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete in accordance with ASTM C94/C94M. Mix concrete materials in appropriate drum-type batch machine mixer.
  1. For mixer capacity of 1 cu. yd. (0.76 cu. m) or smaller, continue mixing at least 1-1/2 minutes, but not more than five minutes after ingredients are in mixer, before any part of batch is released.
  2. For mixer capacity larger than 1 cu. yd. (0.76 cu. m), increase mixing time by 15 seconds for each additional 1 cu. yd. (0.76 cu. m).
  3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verification of Conditions:
  1. Before placing concrete, verify that installation of concrete forms, accessories, and reinforcement, and embedded items is complete and that required inspections have been performed.
  2. Do not proceed until unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Provide reasonable auxiliary services to accommodate field testing and inspections, acceptable to testing agency, including the following:
  1. Daily access to the Work.
  2. Incidental labor and facilities necessary to facilitate tests and inspections.
  3. Secure space for storage, initial curing, and field curing of test samples, including source of water and continuous electrical power at Project site during site curing period for test samples.
  4. Security and protection for test samples and for testing and inspection equipment at Project site.

### 3.3 INSTALLATION OF EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining Work that is attached to or supported by cast-in-place concrete.
  - 1. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
  - 2. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of ANSI/AISC 303.
  - 3. Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.

### 3.4 INSTALLATION OF VAPOR RETARDER

- A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder in accordance with ASTM E1643 and manufacturer's written instructions.
  - 1. Install vapor retarder with longest dimension parallel with direction of concrete pour.
  - 2. Face laps away from exposed direction of concrete pour.
  - 3. Lap vapor retarder over footings and grade beams not less than 6 inches (150 mm), sealing vapor retarder to concrete.
  - 4. Lap joints 6 inches (150 mm) and seal with manufacturer's recommended tape.
  - 5. Terminate vapor retarder at the top of floor slabs, grade beams, and pile caps, sealing entire perimeter to floor slabs, grade beams, foundation walls, or pile caps.
  - 6. Seal penetrations in accordance with vapor retarder manufacturer's instructions.
  - 7. Protect vapor retarder during placement of reinforcement and concrete.
    - a. Repair damaged areas by patching with vapor retarder material, overlapping damages area by 6 inches (150 mm) on all sides, and sealing to vapor retarder.
- B. Bituminous Vapor Retarders: Place, protect, and repair bituminous vapor retarder in accordance with manufacturer's written instructions.

### 3.5 JOINTS

- A. Construct joints true to line, with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Coordinate with floor slab pattern and concrete placement sequence.
  - 1. Install so strength and appearance of concrete are not impaired, at locations indicated on Drawings or as approved by Engineer.
  - 2. Place joints perpendicular to main reinforcement.
    - a. Continue reinforcement across construction joints unless otherwise indicated.
    - b. Do not continue reinforcement through sides of strip placements of floors and slabs.
  - 3. Form keyed joints as indicated. Embed keys at least 1-1/2 inches (38 mm) into concrete.

4. Locate joints for beams, slabs, joists, and girders at third points of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
  5. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
  6. Space vertical joints in walls [as indicated on Drawings] <Insert spacing>. Unless otherwise indicated on Drawings, locate vertical joints beside piers integral with walls, near corners, and in concealed locations where possible.
  7. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
  8. Use epoxy-bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Control Joints in Slabs-on-Ground: Form weakened-plane control joints, sectioning concrete into areas as indicated. Construct control joints for a depth equal to at least **one-fourth** of concrete thickness as follows:
1. Grooved Joints: Form control joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch (3.2 mm). Repeat grooving of control joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
  2. Sawed Joints: Form control joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- (3.2-mm-) wide joints into concrete when cutting action does not tear, abrade, or otherwise damage surface and before concrete develops random cracks.
- D. Isolation Joints in Slabs-on-Ground: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface unless otherwise indicated on Drawings.
  2. Terminate full-width joint-filler strips not less than 1/2 inch (13 mm) or more than 1 inch (25 mm) below finished concrete surface, where joint sealants, specified in Section 079200 "Joint Sealants," are indicated.
  3. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.
- E. Doweled Joints:
1. Install dowel bars and support assemblies at joints where indicated on Drawings.
  2. Lubricate or asphalt coat one-half of dowel bar length to prevent concrete bonding to one side of joint.
- F. Dowel Plates: Install dowel plates at joints where indicated on Drawings.
- 3.6 CONCRETE PLACEMENT
- A. Before placing concrete, verify that installation of formwork, reinforcement, embedded items, and vapor retarder is complete and that required inspections are completed.

1. Immediately prior to concrete placement, inspect vapor retarder for damage and deficient installation, and repair defective areas.
  2. Provide continuous inspection of vapor retarder during concrete placement and make necessary repairs to damaged areas as Work progresses.
- B. Notify Engineer and testing and inspection agencies 24 hours prior to commencement of concrete placement.
- C. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Engineer in writing, but not to exceed the amount indicated on the concrete delivery ticket.
1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- D. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301 (ACI 301M), but not to exceed the amount indicated on the concrete delivery ticket.
1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- E. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness.
1. If a section cannot be placed continuously, provide construction joints as indicated.
  2. Deposit concrete to avoid segregation.
  3. Deposit concrete in horizontal layers of depth not to exceed formwork design pressures and in a manner to avoid inclined construction joints.
  4. Consolidate placed concrete with mechanical vibrating equipment in accordance with ACI 301 (ACI 301M).
    - a. Do not use vibrators to transport concrete inside forms.
    - b. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches (150 mm) into preceding layer.
    - c. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity.
    - d. At each insertion, limit duration of vibration to time necessary to consolidate concrete, and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.
- F. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
1. Do not place concrete floors and slabs in a checkerboard sequence.
  2. Consolidate concrete during placement operations, so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
  3. Maintain reinforcement in position on chairs during concrete placement.
  4. Screed slab surfaces with a straightedge and strike off to correct elevations.
  5. Level concrete, cut high areas, and fill low areas.
  6. Slope surfaces uniformly to drains where required.

7. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface.
8. Do not further disturb slab surfaces before starting finishing operations.

### 3.7 FINISHING FORMED SURFACES

#### A. As-Cast Surface Finishes:

1. ACI 301 (ACI 301M) Surface Finish SF-1.0: As-cast concrete texture imparted by form-facing material.
  - a. Patch voids larger than 1-1/2 inches (38 mm) wide or 1/2 inch (13 mm) deep.
  - b. Remove projections larger than 1 inch (25 mm).
  - c. Tie holes do not require patching.
  - d. Surface Tolerance: ACI 117 (ACI 117M) Class D.
  - e. Apply to concrete surfaces **not exposed to public view**.
2. ACI 301 (ACI 301M) Surface Finish SF-2.0: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams.
  - a. Patch voids larger than 3/4 inch (19 mm) wide or 1/2 inch (13 mm) deep.
  - b. Remove projections larger than 1/4 inch (6 mm).
  - c. Patch tie holes.
  - d. Surface Tolerance: ACI 117 (ACI 117M) Class B.
  - e. Locations: Apply to concrete surfaces **exposed to public view**.

### 3.8 FINISHING FLOORS AND SLABS

- A. Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, ramps, and locations indicated on Drawings.
  1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route.
  2. Coordinate required final finish with Engineer before application.

### 3.9 INSTALLATION OF MISCELLANEOUS CONCRETE ITEMS

#### A. Filling In:

1. Fill in holes and openings left in concrete structures after Work of other trades is in place unless otherwise indicated.
2. Mix, place, and cure concrete, as specified, to blend with in-place construction.
3. Provide other miscellaneous concrete filling indicated or required to complete the Work.



- B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.

### 3.10 CONCRETE CURING

- A. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
  - 1. Comply with ACI 301 (ACI 301M) and ACI 306.1 for cold weather protection during curing.
  - 2. Comply with ACI 301 (ACI 301M) and ACI 305.1 (ACI 305.1M) for hot-weather protection during curing.
  - 3. Maintain moisture loss no more than 0.2 lb/sq. ft. x h (1 kg/sq. m x h), calculated in accordance with ACI 305.1,) before and during finishing operations.
- B. Curing Formed Surfaces: Comply with ACI 308.1 (ACI 308.1M) as follows:
  - 1. Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces.
  - 2. Cure concrete containing color pigments in accordance with color pigment manufacturer's instructions.
  - 3. If forms remain during curing period, moist cure after loosening forms.
  - 4. If removing forms before end of curing period, continue curing for remainder of curing period, as follows:
    - a. Continuous Fogging: Maintain standing water on concrete surface until final setting of concrete.
    - b. Continuous Sprinkling: Maintain concrete surface continuously wet.
    - c. Absorptive Cover: Pre-dampen absorptive material before application; apply additional water to absorptive material to maintain concrete surface continuously wet.
    - d. Water-Retention Sheeting Materials: Cover exposed concrete surfaces with sheeting material, taping, or lapping seams.
    - e. Membrane-Forming Curing Compound: Apply uniformly in continuous operation by power spray or roller in accordance with manufacturer's written instructions.
      - 1) Recoat areas subject to heavy rainfall within three hours after initial application.
      - 2) Maintain continuity of coating and repair damage during curing period.
- C. Curing Unformed Surfaces: Comply with ACI 308.1 (ACI 308.1M) as follows:
  - 1. Begin curing immediately after finishing concrete.
  - 2. Interior Concrete Floors:
    - a. Floors to Receive Floor Coverings Specified in Other Sections: Contractor has option of the following:

- 1) Absorptive Cover: As soon as concrete has sufficient set to permit application without marring concrete surface, install prewetted absorptive cover over entire area of floor.
  - a) Lap edges and ends of absorptive cover not less than 12 inches (300 mm).
  - b) Maintain absorptive cover water saturated, and in place, for duration of curing period, but not less than seven days.
- 2) Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches (300 mm), and sealed by waterproof tape or adhesive.
  - a) Immediately repair any holes or tears during curing period, using cover material and waterproof tape.
  - b) Cure for not less than seven days.
- 3) Ponding or Continuous Sprinkling of Water: Maintain concrete surfaces continuously wet for not less than seven days, utilizing one, or a combination of, the following:
  - a) Water.
  - b) Continuous water-fog spray.

### 3.11 TOLERANCES

- A. Conform to ACI 117 (ACI 117M).

### 3.12 JOINT FILLING

- A. Prepare, clean, and install joint filler in accordance with manufacturer's written instructions.
  1. Defer joint filling until concrete has aged at least [~~one~~] [~~six~~] month(s).
  2. Do not fill joints until construction traffic has permanently ceased.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joints clean and dry.
- C. Install semirigid joint filler full depth in saw-cut joints and at least 2 inches (50 mm) deep in formed joints.
- D. Overfill joint, and trim joint filler flush with top of joint after hardening.

### 3.13 FIELD QUALITY CONTROL

- A. Batch Tickets: For each load delivered, submit three copies of batch delivery ticket to testing agency, indicating quantity, mix identification, admixtures, design strength, aggregate size,

design air content, design slump at time of batching, and amount of water that can be added at Project site.

B. Inspections:

1. Headed bolts and studs.
2. Verification of use of required design mixture.
3. Concrete placement, including conveying and depositing.
4. Curing procedures and maintenance of curing temperature.
5. Verification of concrete strength before removal of shores and forms from beams and slabs.
6. Batch Plant Inspections: On a random basis, as determined by Engineer.

C. Concrete Tests: Testing of composite samples of fresh concrete obtained in accordance with ASTM C 172/C 172M to be performed in accordance with the following requirements:

1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd. (4 cu. m), but less than 25 cu. yd. (19 cu. m), plus one set for each additional 50 cu. yd. (38 cu. m) or fraction thereof.
  - a. When frequency of testing provides fewer than five compressive-strength tests for each concrete mixture, testing to be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
2. Slump: ASTM C143/C143M:
  - a. One test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture.
  - b. Perform additional tests when concrete consistency appears to change.
3. Slump Flow: ASTM C1611/C1611M:
  - a. One test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture.
  - b. Perform additional tests when concrete consistency appears to change.
4. Concrete Temperature: ASTM C1064/C1064M:
  - a. One test hourly when air temperature is 40 deg F (4.4 deg C) and below or 80 deg F (27 deg C) and above, and one test for each composite sample.
5. Unit Weight: ASTM C567/C567M fresh unit weight of structural lightweight concrete.
  - a. One test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
6. Compression Test Specimens: ASTM C31/C31M:
  - a. Cast and laboratory cure two sets of **two** 6-inch (150 mm) by 12-inch (300 mm) or 4-inch (100 mm) by 8-inch (200 mm) cylinder specimens for each composite sample.

- b. Cast, initial cure, and field cure **two** sets of **two** standard cylinder specimens for each composite sample.
7. Compressive-Strength Tests: ASTM C39/C39M.
  - a. Test one set of **two** laboratory-cured specimens at seven days and one set of two specimens at 28 days.
  - b. Test one set of **two** field-cured specimens at seven days and one set of two specimens at 28 days.
  - c. A compressive-strength test to be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
8. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor to evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
9. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength, and no compressive-strength test value falls below specified compressive strength by more than 500 psi (3.4 MPa) if specified compressive strength is 5000 psi (34.5 MPa), or no compressive strength test value is less than 10 percent of specified compressive strength if specified compressive strength is greater than 5000 psi (34.5 MPa).
10. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Engineer but will not be used as sole basis for approval or rejection of concrete.
11. Additional Tests:
  - a. Testing and inspecting agency to make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Engineer.
  - b. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C42/C42M or by other methods as directed by Engineer.
    - 1) Acceptance criteria for concrete strength to be in accordance with ACI 301 (ACI 301M), Section 1.6.6.3.
12. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
13. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

### 3.14 PROTECTION

#### A. Protect concrete surfaces as follows:

1. Protect from petroleum stains.
2. Diaper hydraulic equipment used over concrete surfaces.
3. Prohibit vehicles from interior concrete slabs.
4. Prohibit use of pipe-cutting machinery over concrete surfaces.
5. Prohibit placement of steel items on concrete surfaces.

6. Prohibit use of acids or acidic detergents over concrete surfaces.
7. Protect liquid floor treatment from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by liquid floor treatments installer.
8. Protect concrete surfaces scheduled to receive surface hardener or polished concrete finish using Floor Slab Protective Covering.

END OF SECTION 033000

## SECTION 260100 - BASIC ELECTRICAL REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this and the other sections of Division 26.
- B. All sections of Division 26 are interrelated. Where materials are required to complete work associated with equipment in a specific section, but the materials are not specified within that specific section, the requirements for those materials shall be as specified elsewhere in Division 26.

#### 1.2 SUMMARY

- A. This Section includes general administrative and procedural requirements for electrical installations. The following administrative and procedural requirements are included in this Section to expand the requirements specified in Division 01:
  - 1. Record documents.
  - 2. Project documents.
  - 3. Cutting and patching.
  - 4. Inspections.
- B. Related Sections: The following sections contain requirements that relate to this section:
  - 1. Division 26 Section "Basic Electrical Materials and Methods," for materials and methods common to the remainder of Division 26.

#### 1.3 RECORD DOCUMENTS

- A. Prepare record documents in accordance with the requirements in Division 01 Section "Closeout Procedures." In addition to the requirements specified in Division 01, indicate installed conditions for:
  - 1. Major raceway systems, size and location, for exterior; distribution and branch electrical circuitry; circuit breaker size and arrangements.
  - 2. Equipment locations (exterior), dimensioned from prominent building lines.
  - 3. Approved Contract Modifications.

#### 1.4 PROJECT DOCUMENTS

- A. Division 26 project documents are diagrammatic in nature and intended to represent complete and functioning systems. If any aspect of the work is undefined or unclear, submit your questions in writing prior to the final addendum deadline as defined in the specifications and/or at the pre-bid conference. If any aspect of the work is undefined or unclear after the final addendum, include the cost for the highest quality solution. The contractor is encouraged to thoroughly review the contract documents and site conditions prior to bidding.

## PART 2 - EXECUTION

### 2.1 CUTTING AND PATCHING

- A. General: Perform cutting and patching in accordance with the following requirements:
  - 1. Perform cutting, fitting, and patching of electrical equipment and materials required to:
    - a. Remove and replace defective Work.
    - b. Remove and replace Work not conforming to requirements of the Contract Documents.
    - c. Upon written instructions from the Engineer, uncover and restore Work to provide for Engineer observation of concealed Work.
  - 2. Cut, remove, and legally dispose of selected electrical equipment, components, and materials as indicated, including but not limited to removal of electrical items indicated to be removed and items made obsolete by the new Work.
  - 3. Protect the structure, furnishings, finishes, and adjacent materials not indicated or scheduled to be removed.
  - 4. Protection of Installed Work: During cutting and patching operations, protect adjacent installations.

### 2.2 INSPECTIONS

- A. Authority Having Jurisdiction: Notify and schedule all inspections, with a minimum of 10 days notice in writing prior, to the Authority Having Jurisdiction.

END OF SECTION 260100

## SECTION 260500 - BASIC ELECTRICAL MATERIALS AND METHODS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Electrical Equipment Installation.
  - 2. Sleeves and sleeve seals for raceway and cable.
  - 3. Firestopping.
  - 4. Concrete equipment bases.
  - 5. Touchup painting.

#### 1.3 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a third-party testing agency amongst those accredited by the NCBCC (North Carolina Building Code Council) to label electrical and mechanical equipment.
- B. Comply with NFPA 70.
- C. Electrical equipment shall be new and manufactured within the last 12 months unless otherwise noted and approved by the engineer.

#### 1.4 COORDINATION

- A. Sequence, coordinate, and integrate installing electrical materials and equipment for efficient flow of the Work.

### PART 2 - PRODUCTS

#### 2.1 TOUCHUP PAINT

- A. For Equipment: Equipment manufacturer's paint selected to match installed equipment finish.
- B. Galvanized Surfaces: Zinc-rich paint recommended by item manufacturer.



PART 3 - EXECUTION

3.1 ELECTRICAL EQUIPMENT INSTALLATION

- A. Materials and Components: Install level, plumb, and parallel and perpendicular to other building systems and components, unless otherwise indicated.
- B. Right of Way: Give to raceways and piping systems installed at a required slope.

3.2 REFINISHING AND TOUCHUP PAINTING

- A. Refinish and touch up paint. Paint materials and application requirements are specified in **Division 09 Section "Exterior Painting"**
  - 1. Clean damaged and disturbed areas and apply primer, intermediate, and finish coats to suit the degree of damage at each location.
  - 2. Follow paint manufacturer's written instructions for surface preparation and for timing and application of successive coats.
  - 3. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
  - 4. Repair damage to PVC or paint finishes with matching touchup coating recommended by manufacturer.

3.3 CLEANING AND PROTECTION

- A. On completion of installation, inspect exposed finishes. Remove burrs, dirt, paint spots, and construction debris.
- B. Protect equipment and installations and maintain conditions to ensure that coatings and finishes are without damage or deterioration at time of Final Acceptance.

END OF SECTION 260510

## SECTION 31 10 10 – EROSION AND SEDIMENT CONTROL

## PART 1 - GENERAL

## 1.1 SCOPE

- A. Related work specified elsewhere:
  - 1. Selective Demolition (Section 024119)
  - 2. Earth Moving (Section 312000)
- B. See the Wilmington, NC and the North Carolina Department of Environmental Quality Erosion and Sediment Control planning and Design Manual and any subsequent amendments, for details, procedures and practices expected for compliance with these specifications.
- C. The extent of major requirements is indicated on the drawings. This Contractor shall adhere to the approved sequence of construction and installation of erosion control measures as detailed. This Contractor shall be responsible for monitoring the effectiveness of the erosion control measures, and repairing, replacing or modifying the control measures as required to effectively control siltation and erosion, including the protection of public rights-of-way and points of storm water discharge.
- D. No change orders or modifications to the Contract amount shall be allowed for relocation, readjustments, or modifications to erosion control measures required to contain all sediment on the site. This Contractor shall accept full responsibility for the performance of containing all sediment on the site and any penalties that might be assessed to the Owner because of the failure of any measures shall be paid by this Contractor.
- E. Temporary grassing shall be installed on all graded areas within 7 calendar days of last disturbance as per the NCDEQ, as contained herein, and on the drawings.
- F. This Contractor shall purchase and maintain a copy of the North Carolina Erosion and Sediment Control Manual for immediate reference at the job site at all times. Refer to this manual for details, procedures and practices expected for compliance with these specifications.
- G. Submit samples of all erosion control products for review and approval prior to purchase and installation.
- H. This Contractor shall inspect each erosion control device a minimum of once per week and after any 1” or greater rainfall event. Results of each inspection shall be signed and recorded by the inspector for each device in a loose-leaf three ring binder kept on the site for the duration of the site construction.

PART 2 - PRODUCTS

- 2.1 Construction Entrances: Install where shown on the drawings. All temporary construction entrances must be repaired and reestablished like “new” each month and maintained throughout construction. Tracking of mud and debris on adjacent paved streets will not be allowed at any time. See detail on drawings.
- 2.2 Turbidity Curtain: Install where shown on the drawings. All temporary turbidity curtains shall be continuously maintained to ensure effectiveness. The contractor shall create a completely enclosed area during all pile jetting operations. See detail on drawings.
- 2.3

PART 3 - EXECUTION

- 3.1 This Contractor shall follow the approved Sequence of Construction shown on the plans and all measures shall be installed and maintained as per the North Carolina Erosion and Sediment Control Manual and approved plan.
- 3.2 Install and maintain all erosion control measures as required. See plans for location and extent.
- 3.3 Temporary Grassing: Prepare seed bed so that it is well-pulverized, loose and uniform. Apply lime according to soil test recommendations or at rates indicated here within. Add fertilizer at rates indicated and incorporate into the top 4-6 inches of soil. Evenly apply seed type at the indicated rates based on site location and time of year. Mulch area with straw and tack with asphalt, netting or other approved mulch anchoring tool. A disc with blades set nearly straight can be used as a mulch anchoring tool if properly executed.
  - A. Maintain temporary "Fall" grassing by repairing and refertilizing damaged areas immediately. Top dress with 50 lbs/acre of nitrogen in March. If necessary to extend temporary cover beyond June 15, overseed with 50 lbs/acre Kobe (Piedmont and Coastal Plain) or Korean (Mountains) Lespedeza in late February or early March.

END OF SECTION 311010

## SECTION 312000 – EARTH MOVING

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

## A. Section Includes:

1. Excavating and filling for rough grading the Site.
2. Preparing subgrades for gravel laydown yard, turf and grasses and plants.
3. Excavating and backfilling for buildings and structures.
4. Subbase course and base course for asphalt paving.
5. Subsurface drainage backfill for walls and trenches.
6. Excavating and backfilling trenches for utilities and pits for buried utility structures.

## 1.3 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
  1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
  2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.
- C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
  1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for unit prices.
  2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
  3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, shall be without additional compensation.
- F. Fill: Soil materials used to raise existing grades.

- G. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- H. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- I. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Material Test Reports: For each borrow soil material proposed for fill and backfill as follows:
  - 1. Classification according to ASTM D2487.
  - 2. Laboratory compaction curve according to ASTM D698.

#### 1.5 QUALITY ASSURANCE

- A. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E329 and ASTM D3740 for testing indicated.

#### 1.6 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth-moving operations.
  - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
  - 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing earth moving indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
  - 1. Do not proceed with work on adjoining property until directed by Engineer.
- C. Utility Locator Service: Notify "Miss Utility" for area where Project is located before beginning earth-moving operations.
- D. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures are in place.

## PART 2 - PRODUCTS

## 2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D2487, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D2487, or a combination of these groups.
  - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; except with 100 percent passing a 1-inch (25-mm) sieve and not more than 8 percent passing a No. 200 sieve.
- H. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and zero to 5 percent passing a No. 8 sieve.
- I. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch sieve and zero to 5 percent passing a No. 4 sieve.
- J. Sand: ASTM C33/C33M; fine aggregate.
- K. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

### 3.2 DEWATERING

- A. Provide dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.
- B. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- C. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
  - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
- D. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.

### 3.3 EXCAVATION, GENERAL

- A. **Unclassified Excavation:** Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
  - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
- B. **Classified Excavation:** Excavate to subgrade elevations. Material to be excavated will be classified as earth and rock. Do not excavate rock until it has been classified and cross sectioned by Engineer. The Contract Sum will be adjusted for rock excavation according to unit prices included in the Contract Documents. Changes in the Contract Time may be authorized for rock excavation.

1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; and soil, boulders, and other materials not classified as rock or unauthorized excavation.
  - a. Intermittent drilling; blasting, if permitted; ram hammering; or ripping of material not classified as rock excavation is earth excavation.

### 3.4 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

### 3.5 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
  1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
  2. Surveying locations of underground utilities for Record Documents.
  3. Testing and inspecting underground utilities.
  4. Removing concrete formwork.
  5. Removing trash and debris.
  6. Removing temporary shoring, bracing, and sheeting.
  7. Installing permanent or temporary horizontal bracing on horizontally supported walls.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

### 3.6 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D698:
  1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
  2. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
  3. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.



### 3.7 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
  - 1. Provide a smooth transition between adjacent existing grades and new grades.
  - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
  - 1. Turf or Unpaved Areas: Plus or minus 1 inch.
  - 2. Pavements: Plus or minus 1/2 inch.

### 3.8 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

- A. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place subbase course and base course under pavements and walks as follows:
  - 1. Install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
  - 2. Place base course material over subbase course under hot-mix asphalt pavement.
  - 3. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D698.
- C. Pavement Shoulders: Place shoulders along edges of subbase course and base course to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase and base layer to not less than 95 percent of maximum dry unit weight according to ASTM D698.

### 3.9 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

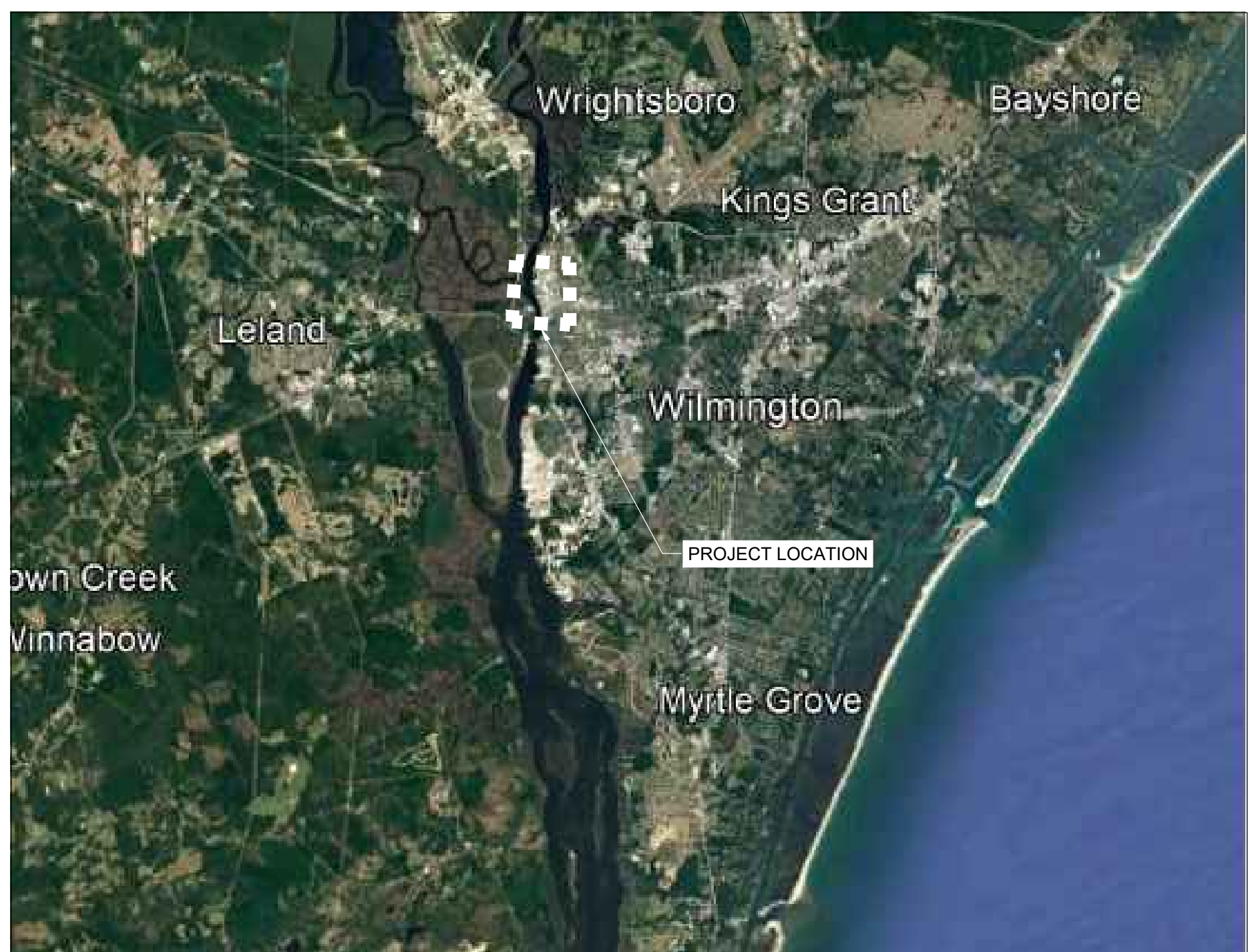
END OF SECTION 312000

# BEST WESTERN PIER DEMOLITION

CITY OF WILMINGTON CONTRACT NO: LOI 06-2020.B  
CITY OF WILMINGTON FISCAL/PROJECT NO: 50136016  
CITY OF WILMINGTON, NC



Dewberry Engineers Inc.  
2610 WYCLIFF ROAD  
SUITE 410  
RALEIGH, NC 27607  
PHONE: 919.881.9939  
FAX: 919.881.9923  
NCBELS #F-0929



**LOCATION MAP**  
N.T.S

INDEX OF DRAWINGS	
SHEET NO.	TITLE
G001	TITLE SHEET
C001	CIVIL NOTES
C101	EXISTING PLAN AND PROFILE
C201 - C203	PHOTO SHEETS
C301	LIMITS OF DEMOLITION AND RIVER WALK CLOSURE
C401	DEMOLITION PLAN AND PROFILE
C501	PROPOSED FINAL CONDITIONS
C601	TURBIDITY CURTAIN PLAN
E001	LEGEND, NOTES AND PANEL SCHEDULE
E101	ELECTRICAL DEMOLITION PLAN AND PROFILE



**VICINITY MAP**  
N.T.S.

BILL SAFFO, MAYOR  
MARGARET HAYNES, MAYOR PRO-TEM  
TONY CAUDLE, INTERIM CITY MANAGER  
KEVIN SPEARS, COUNCIL MEMBER  
KEVIN O'GRADY, COUNCIL MEMBER  
NEIL ANDERSON, COUNCIL MEMBER  
CHARLES H. RIVENBARK, COUNCIL MEMBER  
CLIFFORD D. BARNETT, SR., COUNCIL MEMBER  
DENISE FREUND, DIVISION ENGINEER  
ANTHONY GEATHERS, EI, PROJECT MANAGER

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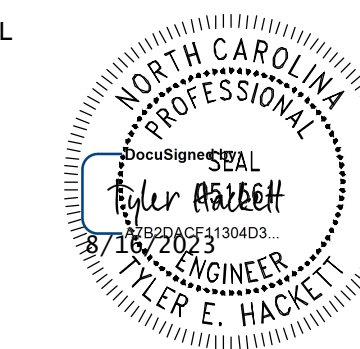
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NCBELS #F-0929

BEST WESTERN  
PIER DEMOLITION  
CITY OF WILMINGTON, NC

SEAL



KEY PLAN

NOT TO SCALE

No.	DATE	BY	Description

REVISIONS

DRAWN BY: NC  
APPROVED BY: TH  
CHECKED BY: TH  
DATE: JULY 2023

TITLE

TITLE  
PAGE

PROJECT NO. 50136016

G001



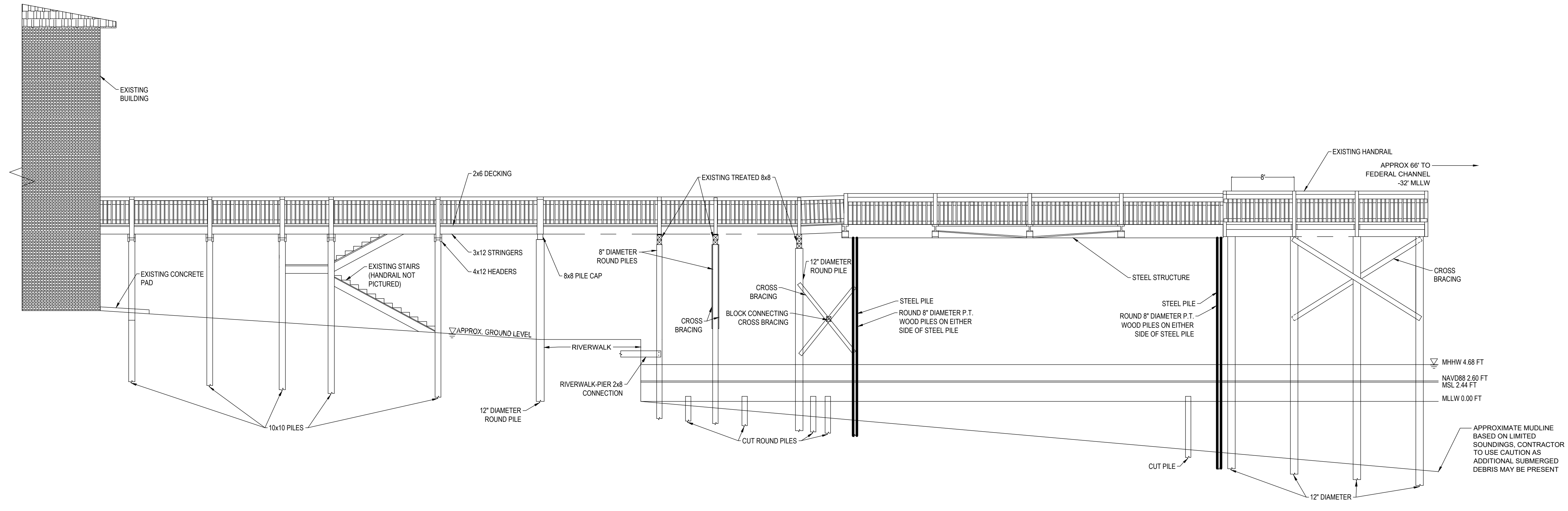
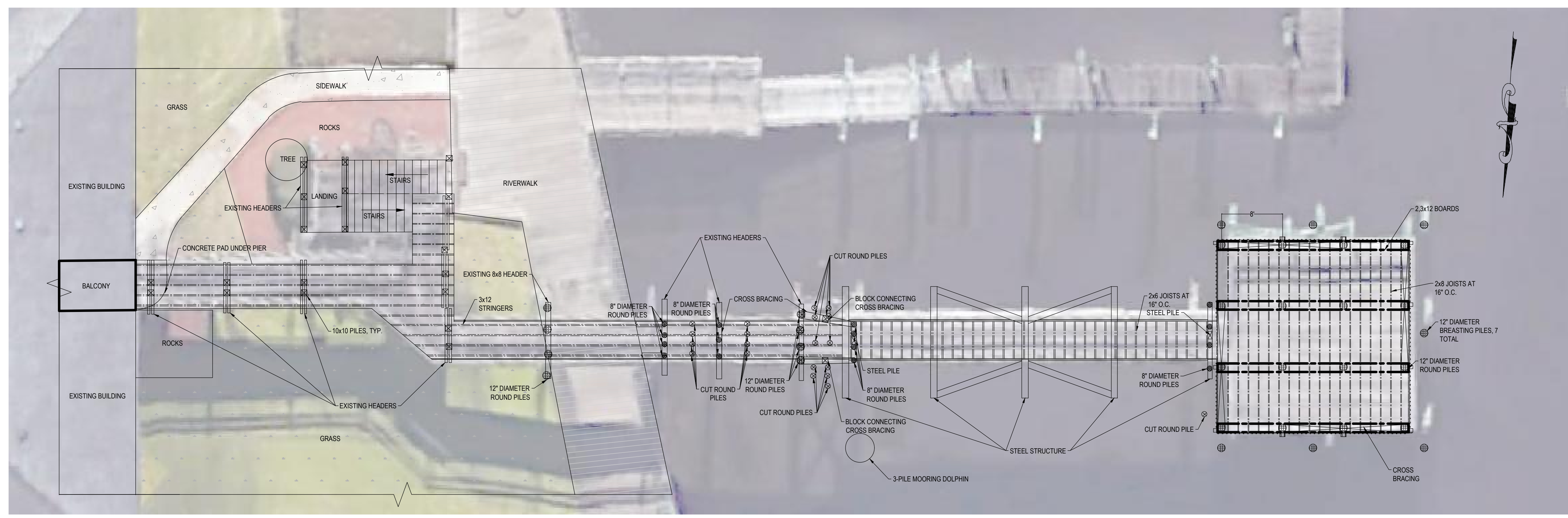
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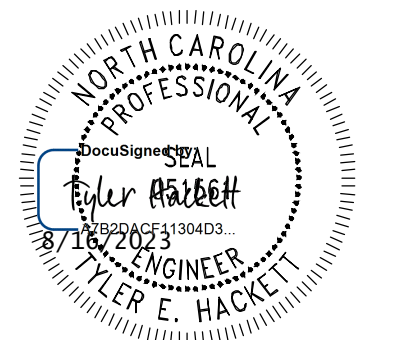
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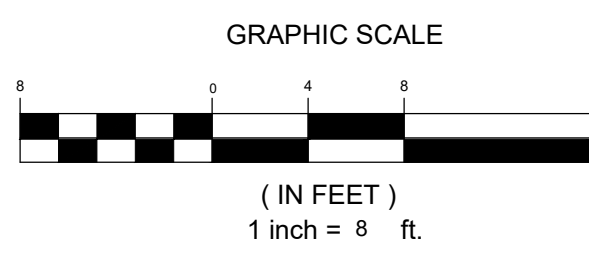


- NOTES:
1. SIZING, SPACING, QUANTITY AND PLACEMENT OF PILES, JOISTS, BOARDS, STRINGERS, RAILING DETAILS, ETC., ARE APPROXIMATE AND WERE ESTIMATED USING BEST JUDGEMENT FROM IMAGERY UNLESS NOTED
  2. PILES ARE P.T. WOOD UNLESS NOTED
  3. MUDLINE CONTOURS AND UPLAND CONTOURS ARE APPROXIMATE AND BASED ON BEST AVAILABLE DATA AND LIDAR.
  4. TIP ELEVATION OF ALL PILES IS UNKNOWN AND SHOWN AS SUCH IN DRAWINGS.
  5. CONSTRUCTION METHODOLOGY SHOULD LIMIT POTENTIAL FOR DEBRIS ENTERING WATERWAY TO GREATEST EXTENT POSSIBLE.

SEAL



KEY PLAN




No.	DATE	BY	Description
REVISIONS			

DRAWN BY: NC  
 APPROVED BY: TH  
 CHECKED BY: TH  
 DATE: JULY 2023

TITLE: **EXISTING PLAN AND PROFILE**

PROJECT NO. 50136016

**C101**

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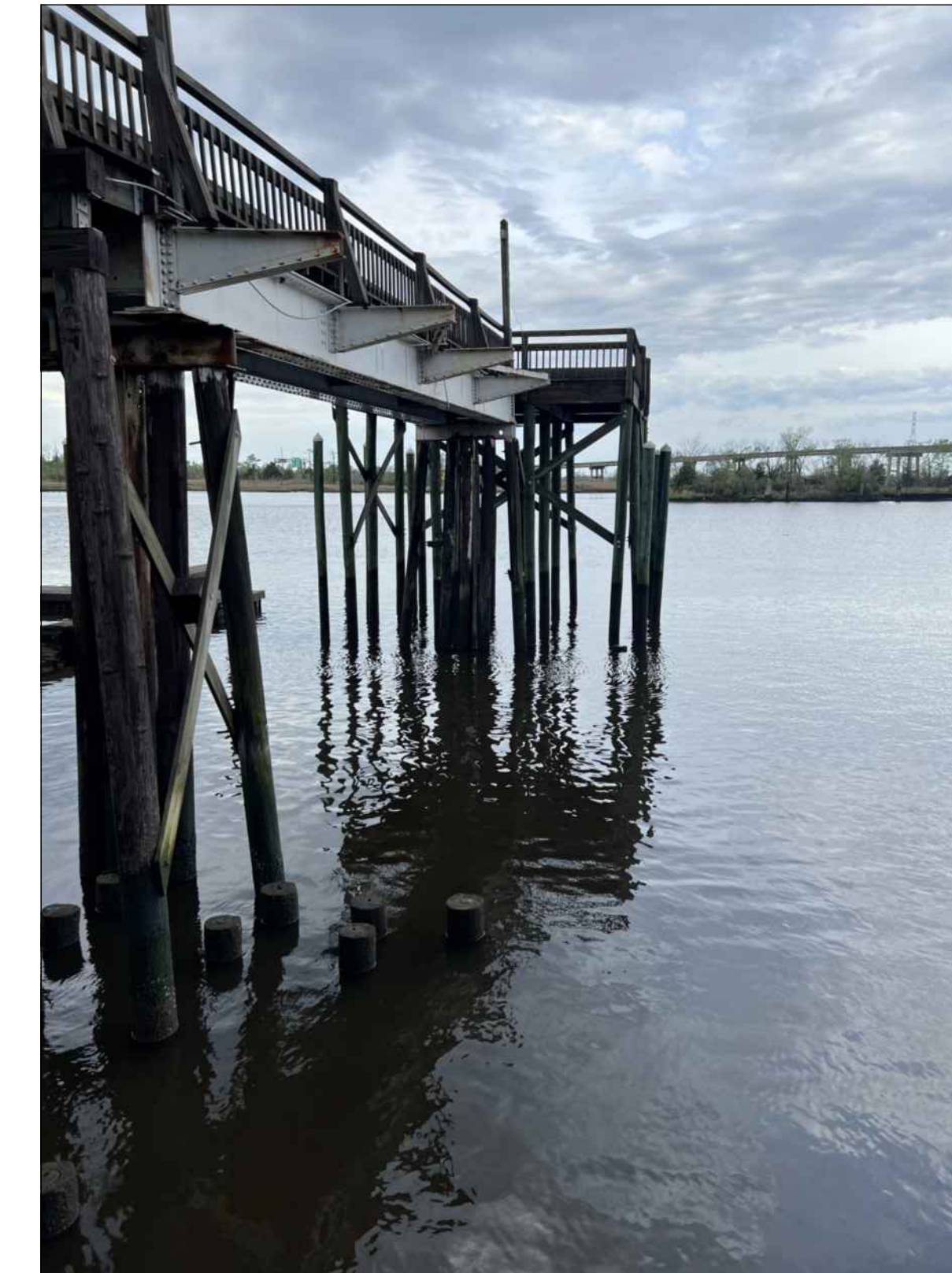
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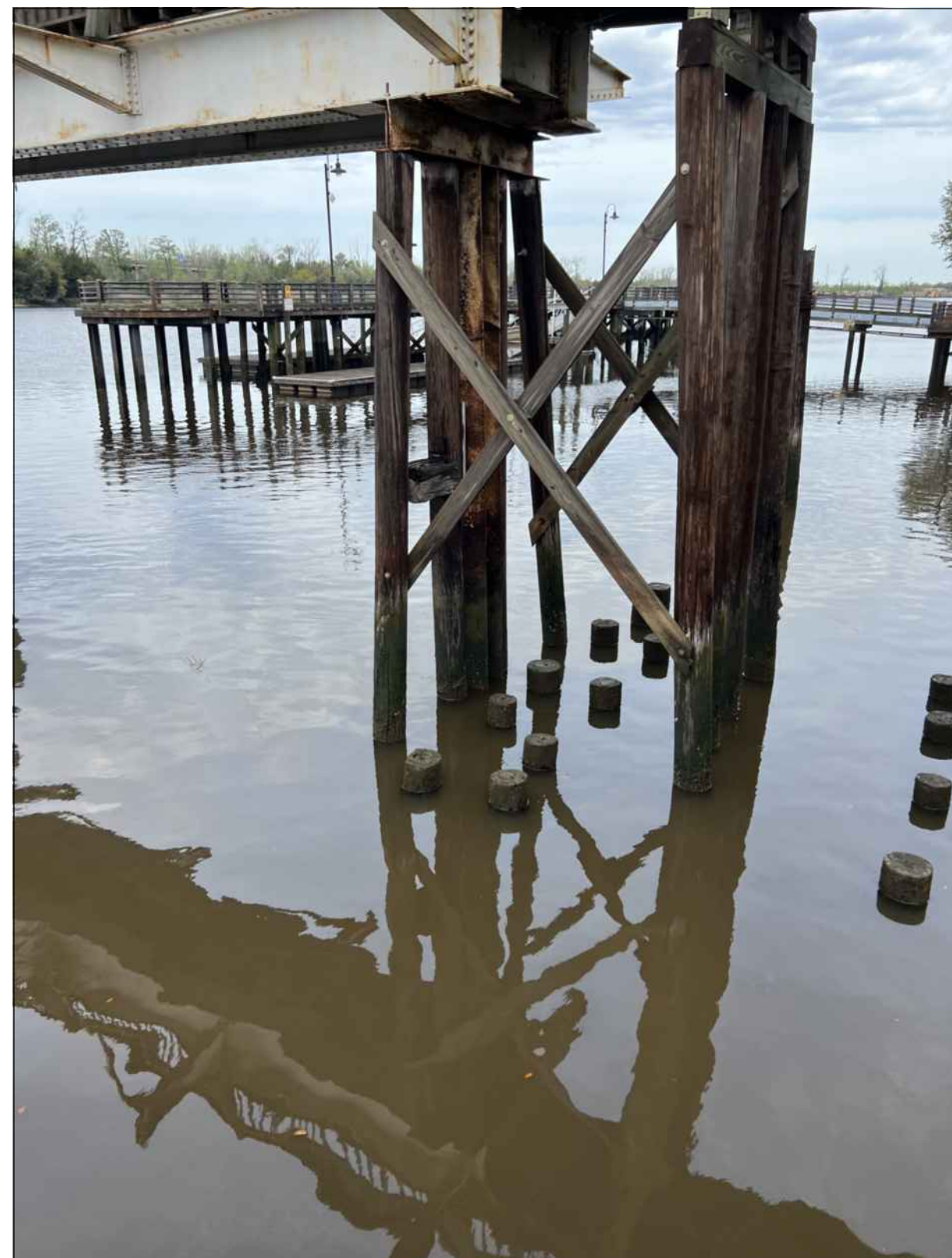
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C201



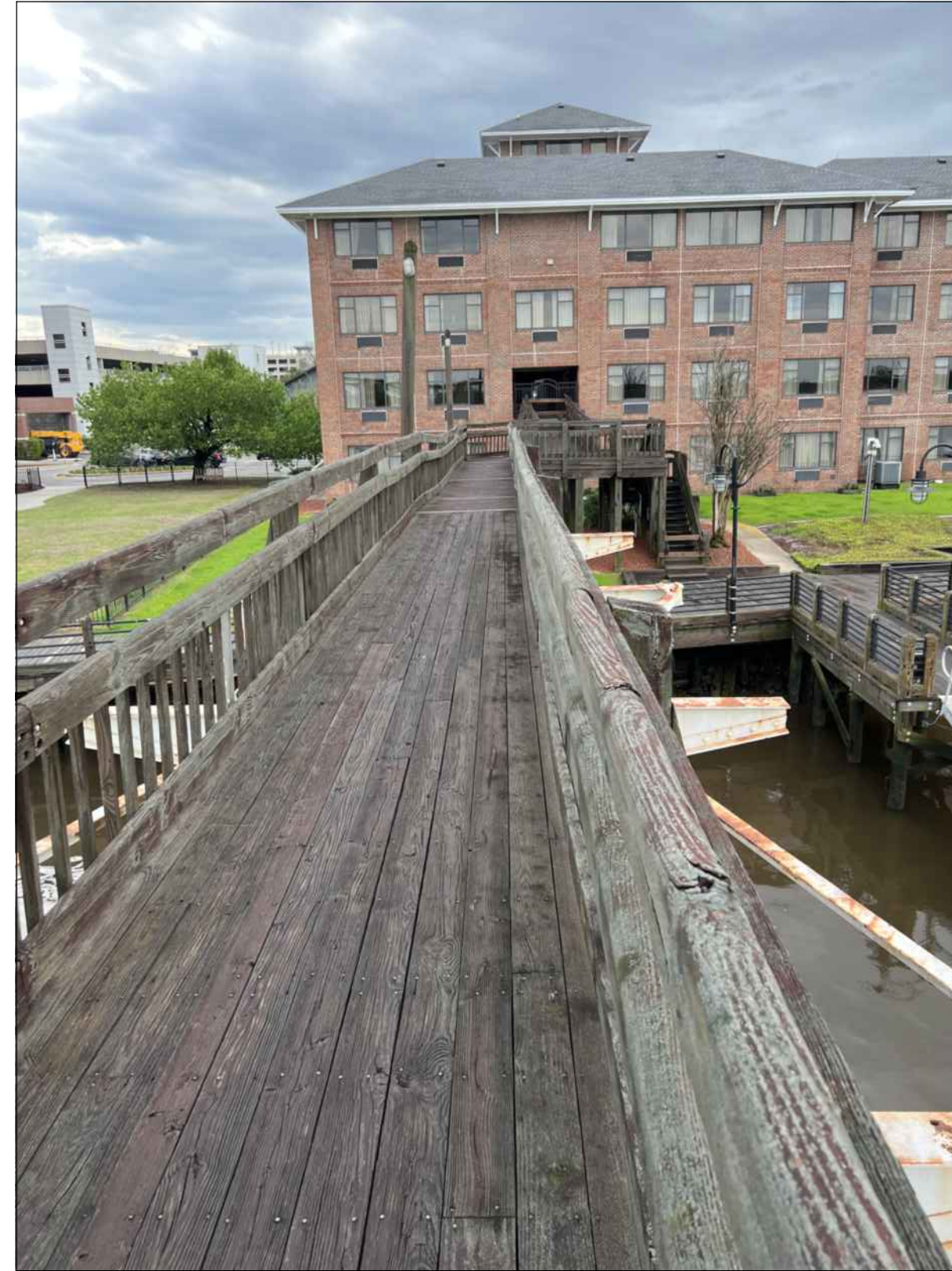
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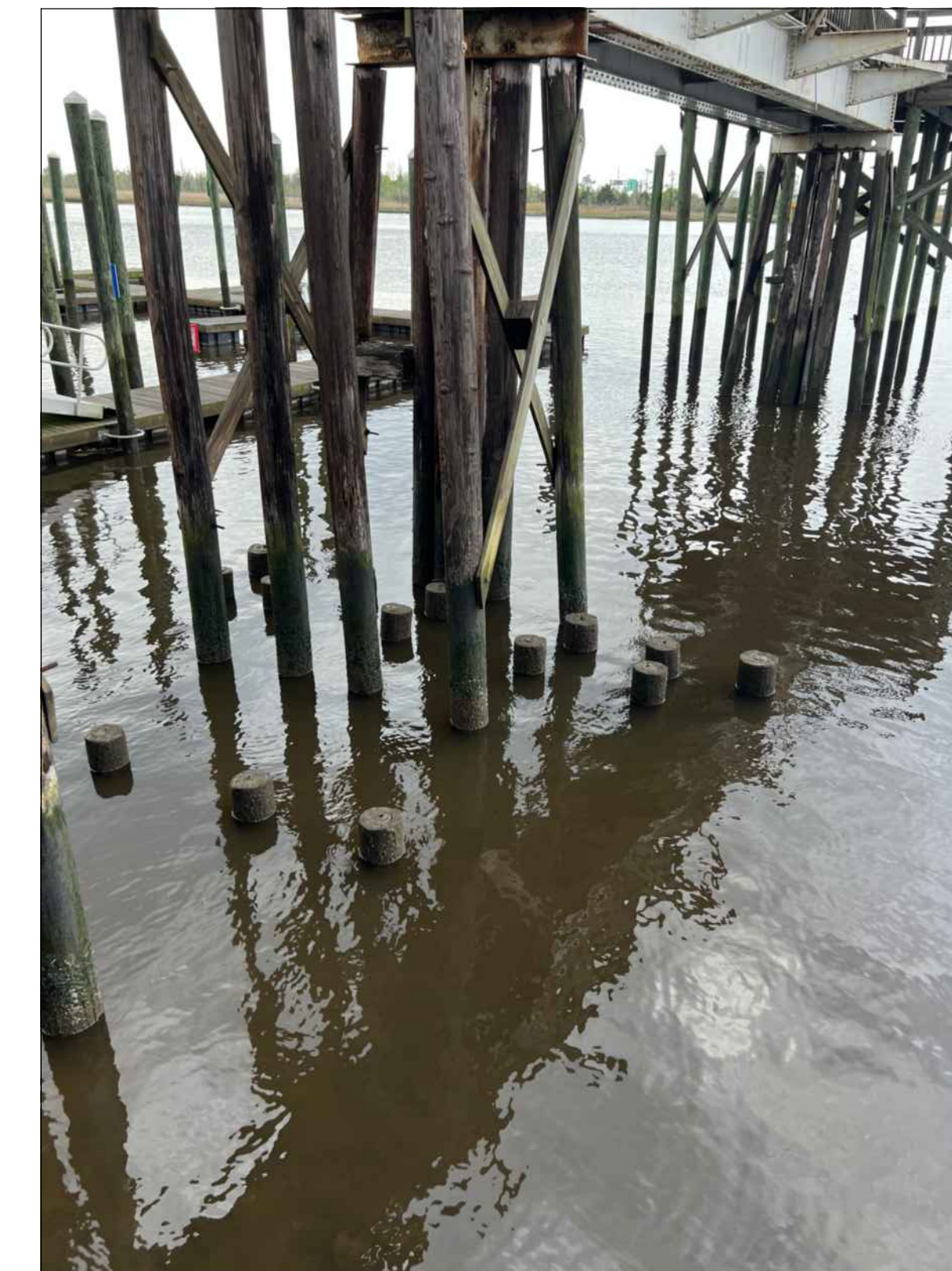
3 NORTH SIDE OF PIER  
C201



4 PILES ON SOUTH SIDE OF PIER  
C201



5 EAST FACING PIER VIEW  
C201



6 PILES ON NORTH SIDE OF PIER  
C201

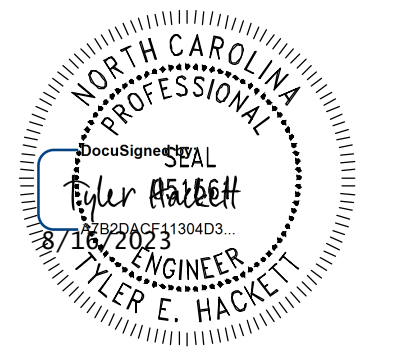


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BEST WESTERN  
PIER DEMOLITION  
CITY OF WILMINGTON, NC

SEAL



KEY PLAN

NOT TO SCALE


No.	DATE	BY	Description
REVISIONS			

DRAWN BY: NC  
APPROVED BY: TH  
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DATE: JULY 2023

TITLE  
**PHOTO SHEET 1**

PROJECT NO. 50136016

**C201**

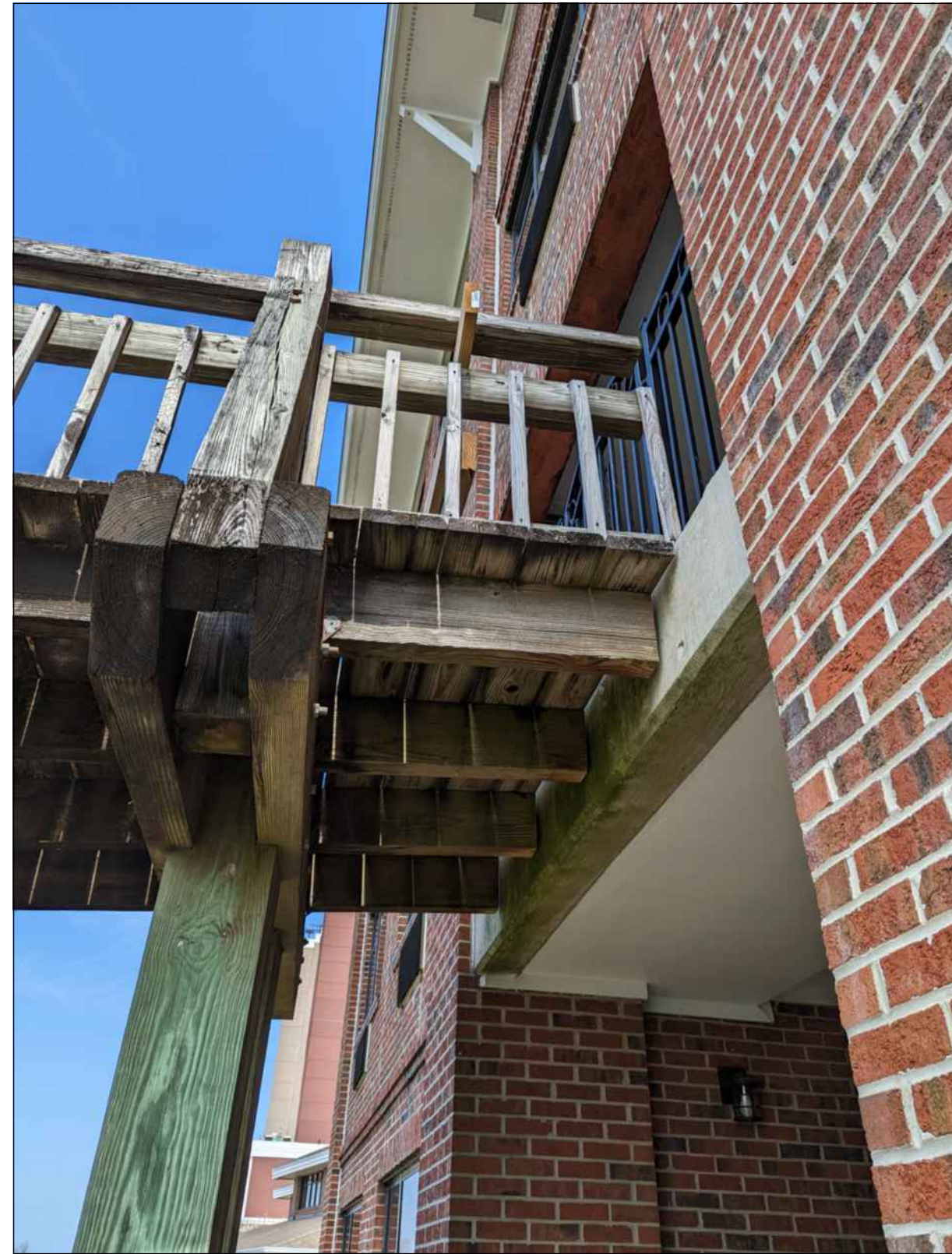
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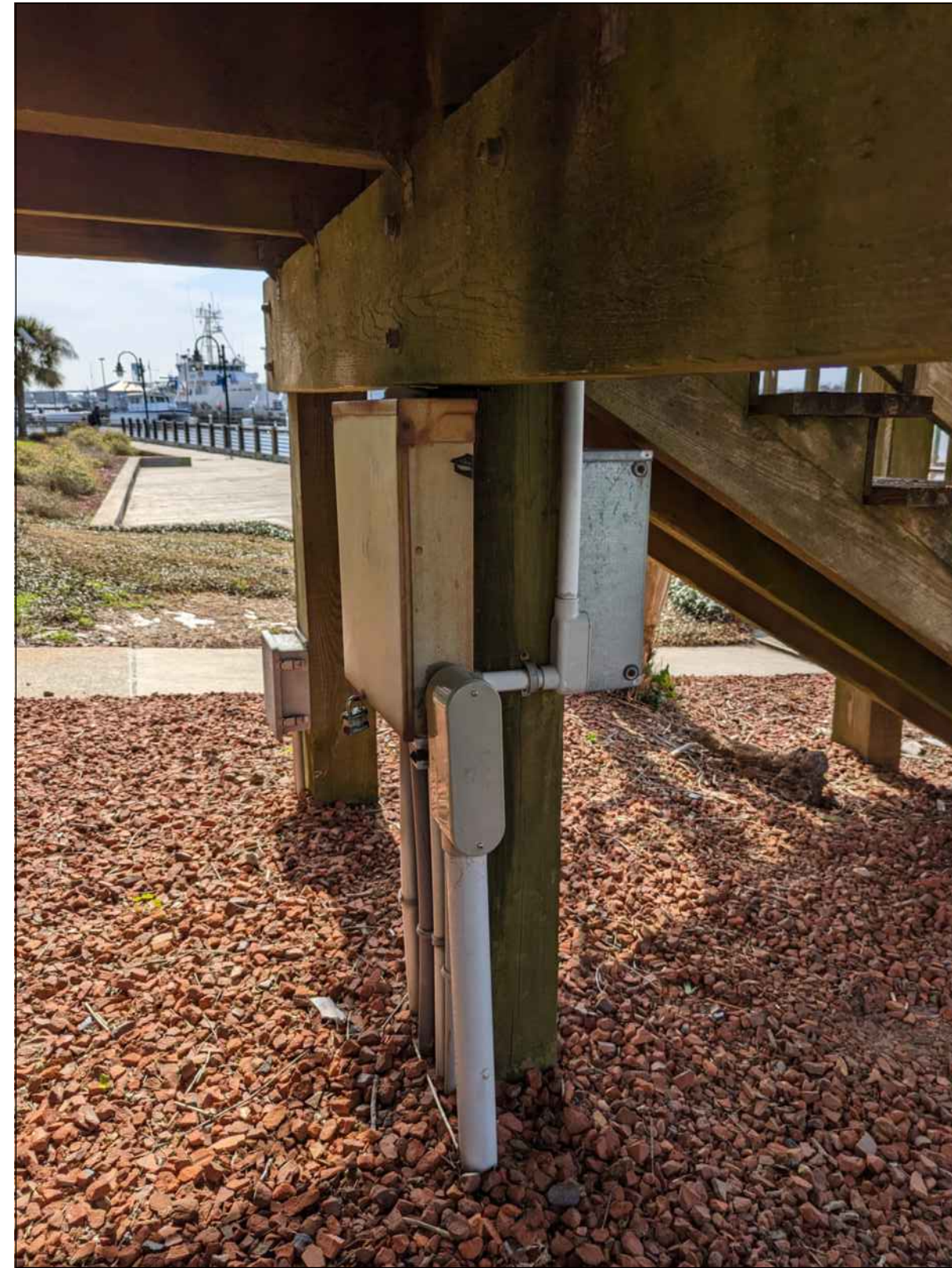
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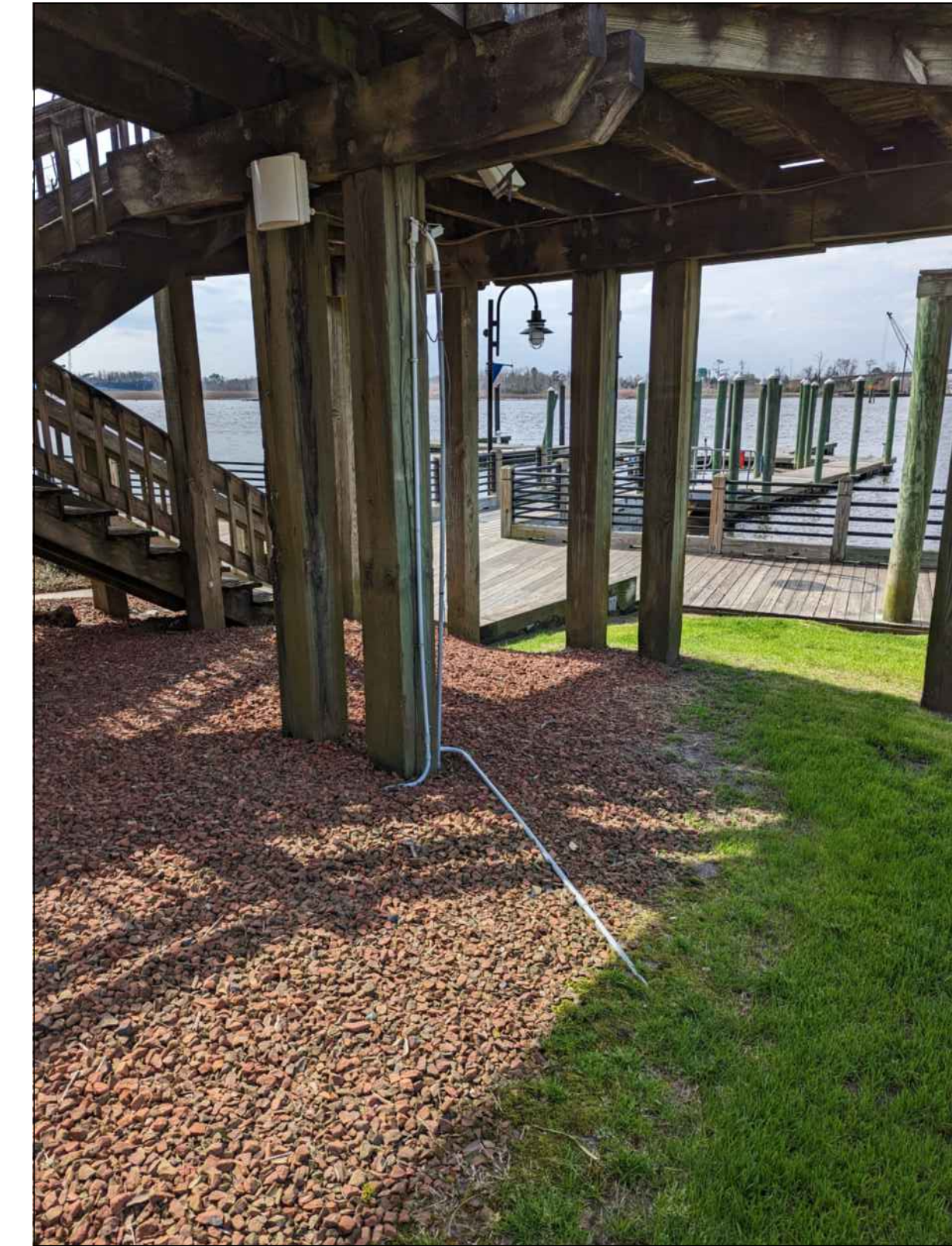
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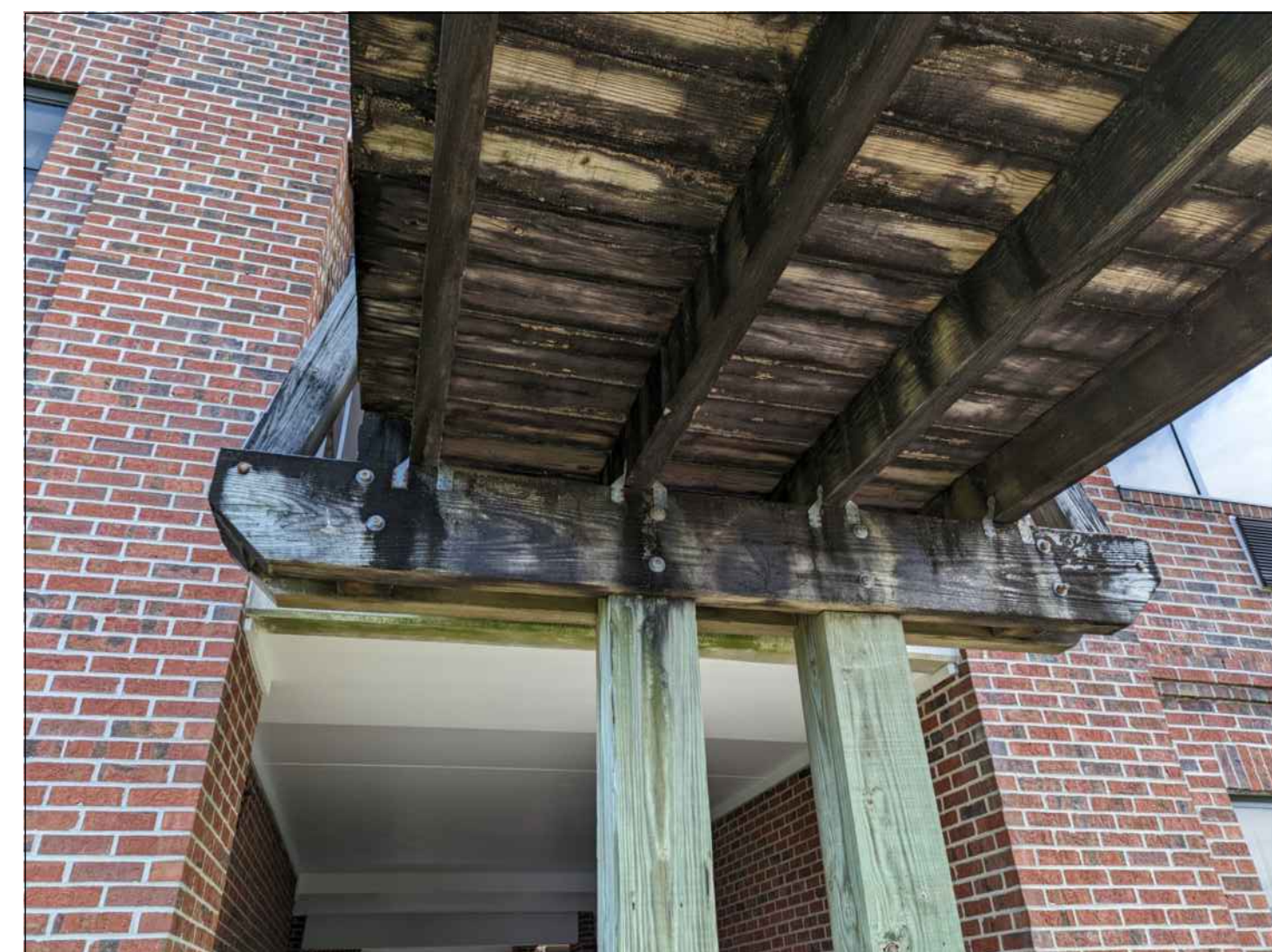
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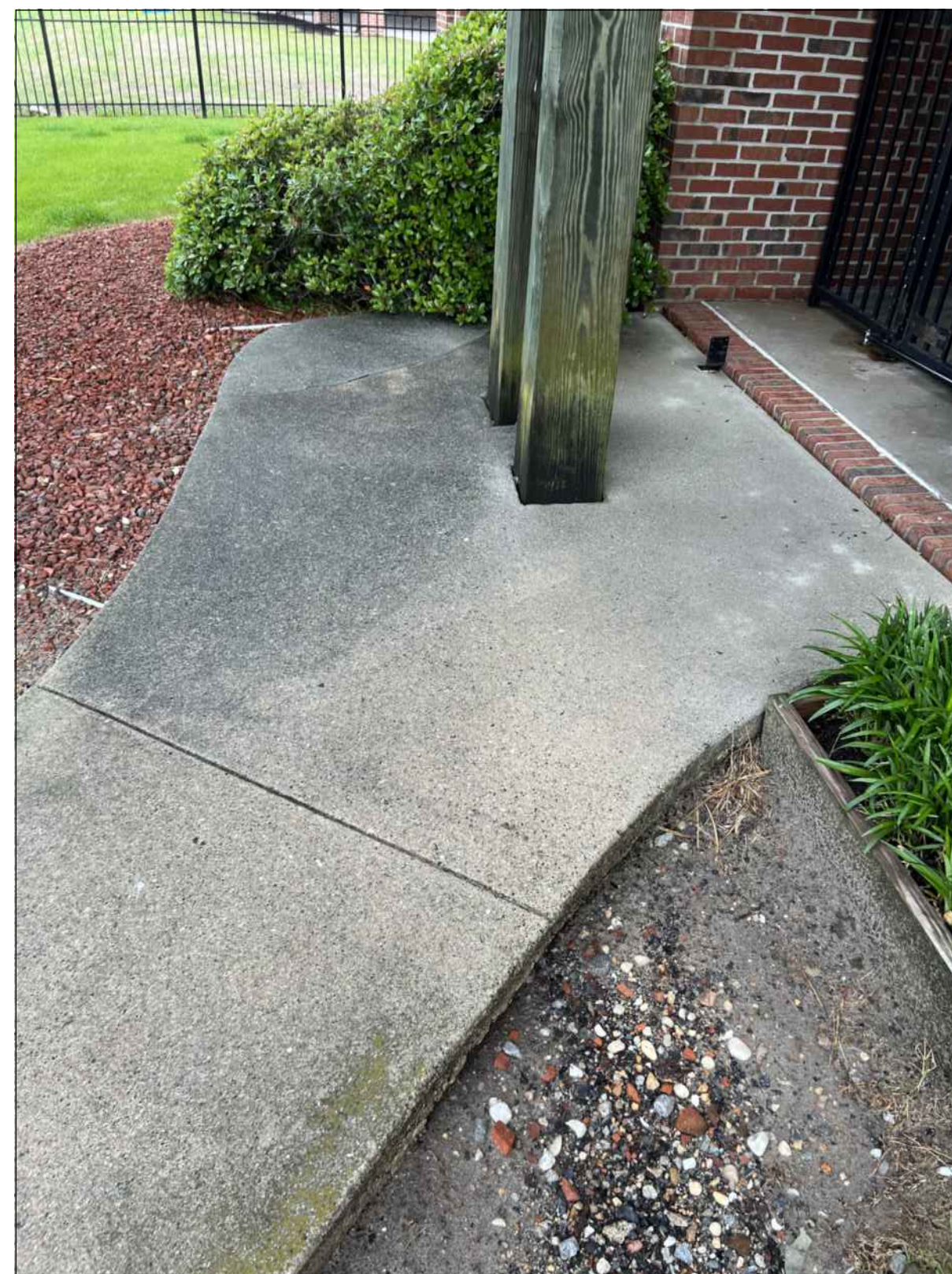
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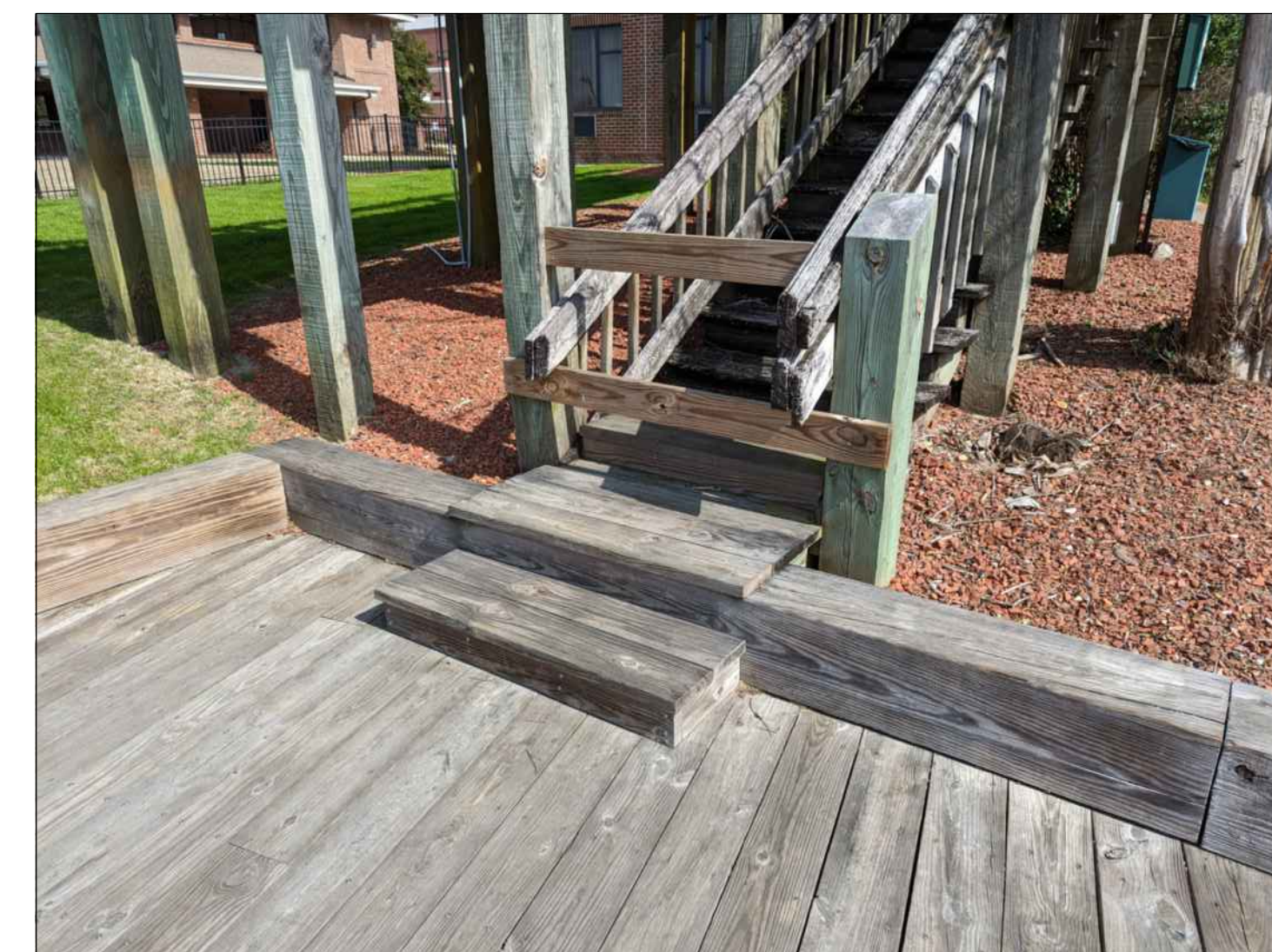
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4 BUILDING CONNECTION 2  
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5 CONCRETE PAD  
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6 STAIRS  
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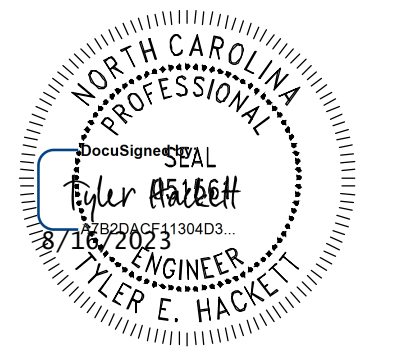


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BEST WESTERN  
PIER DEMOLITION  
CITY OF WILMINGTON, NC

SEAL



KEY PLAN

NOT TO SCALE


No.	DATE	BY	Description
REVISIONS			

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DATE JULY 2023

TITLE

PHOTO SHEET 2

PROJECT NO. 50136016

C202

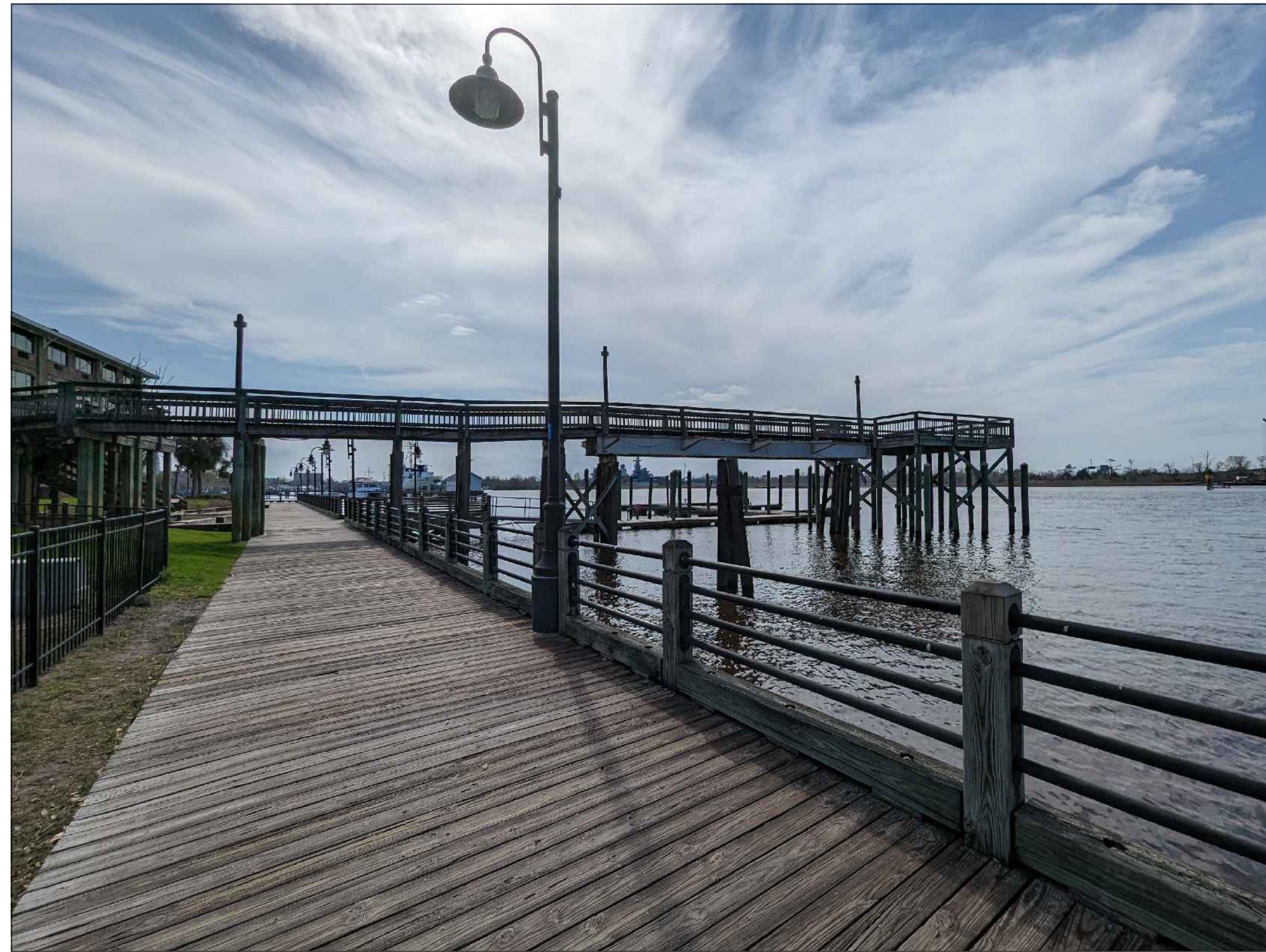
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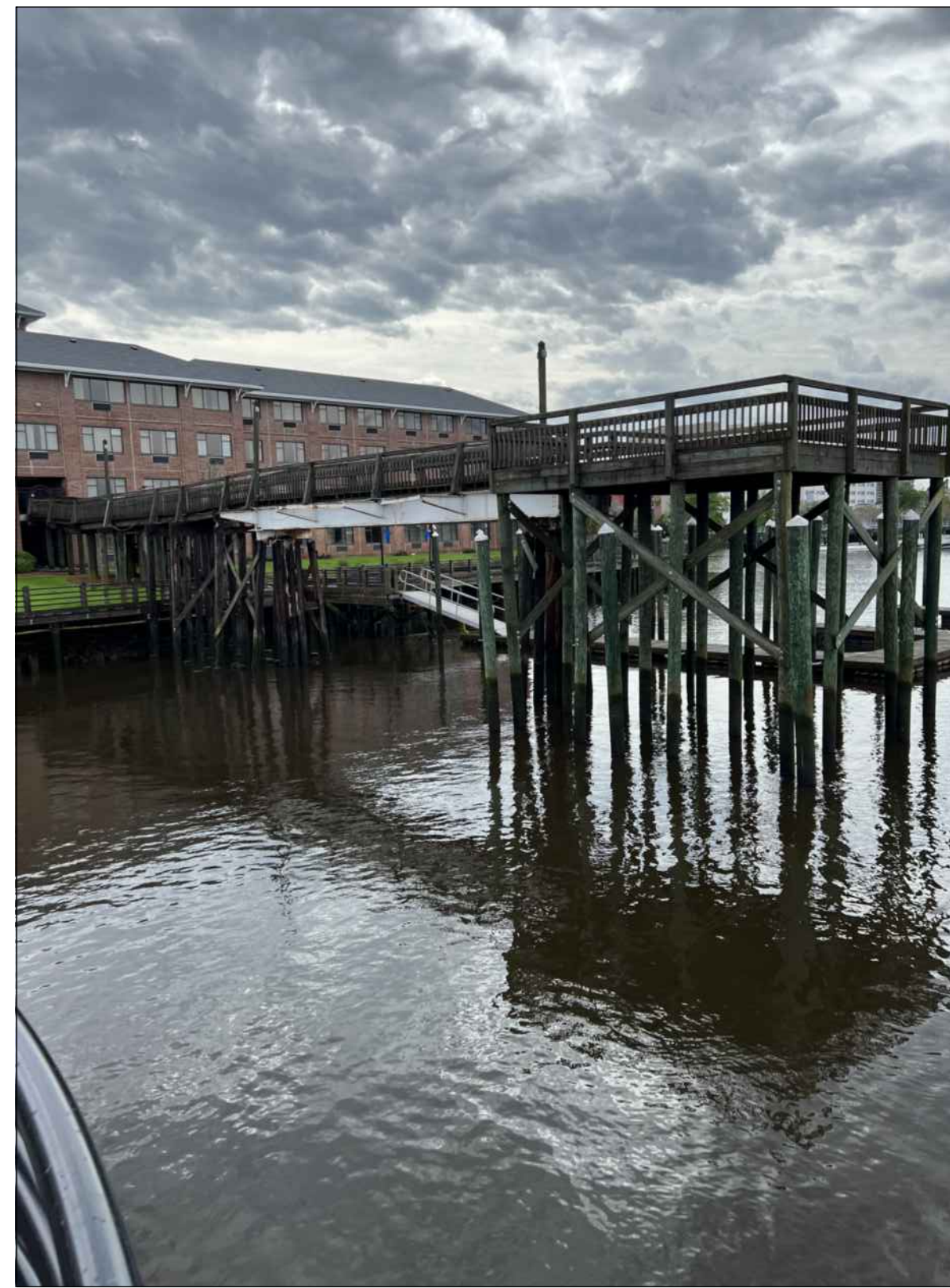
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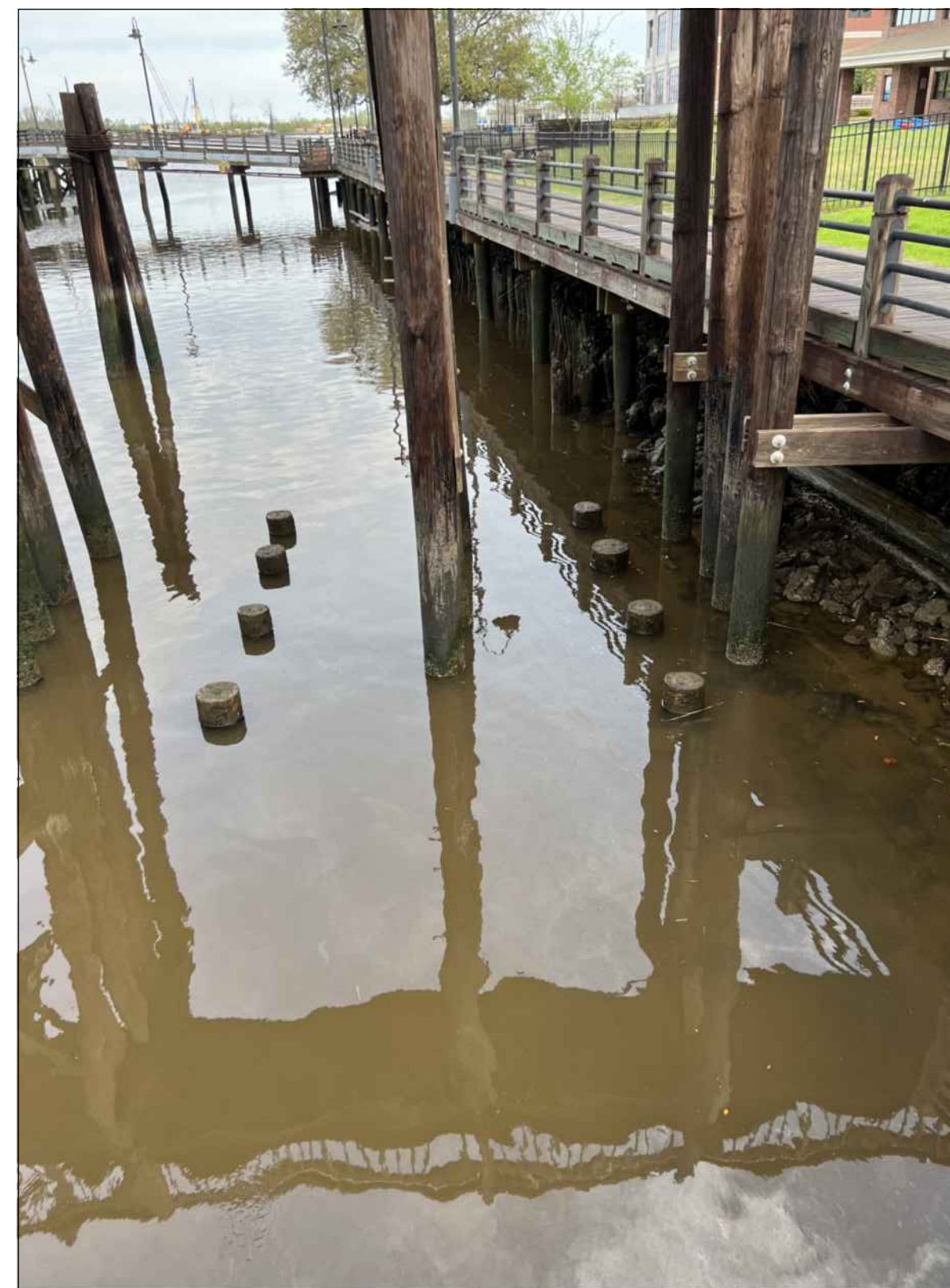
1 SOUTHWEST FACING PIER VIEW  
C203



3 MORING DOLPHIN  
C203



2 SOUTHEAST FACING PIER VIEW  
C203



4 PIER-RIVERWALK CONNECTION  
C203

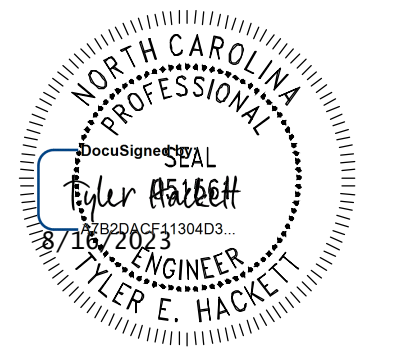


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BEST WESTERN  
PIER DEMOLITION  
CITY OF WILMINGTON, NC

SEAL



KEY PLAN

NOT TO SCALE

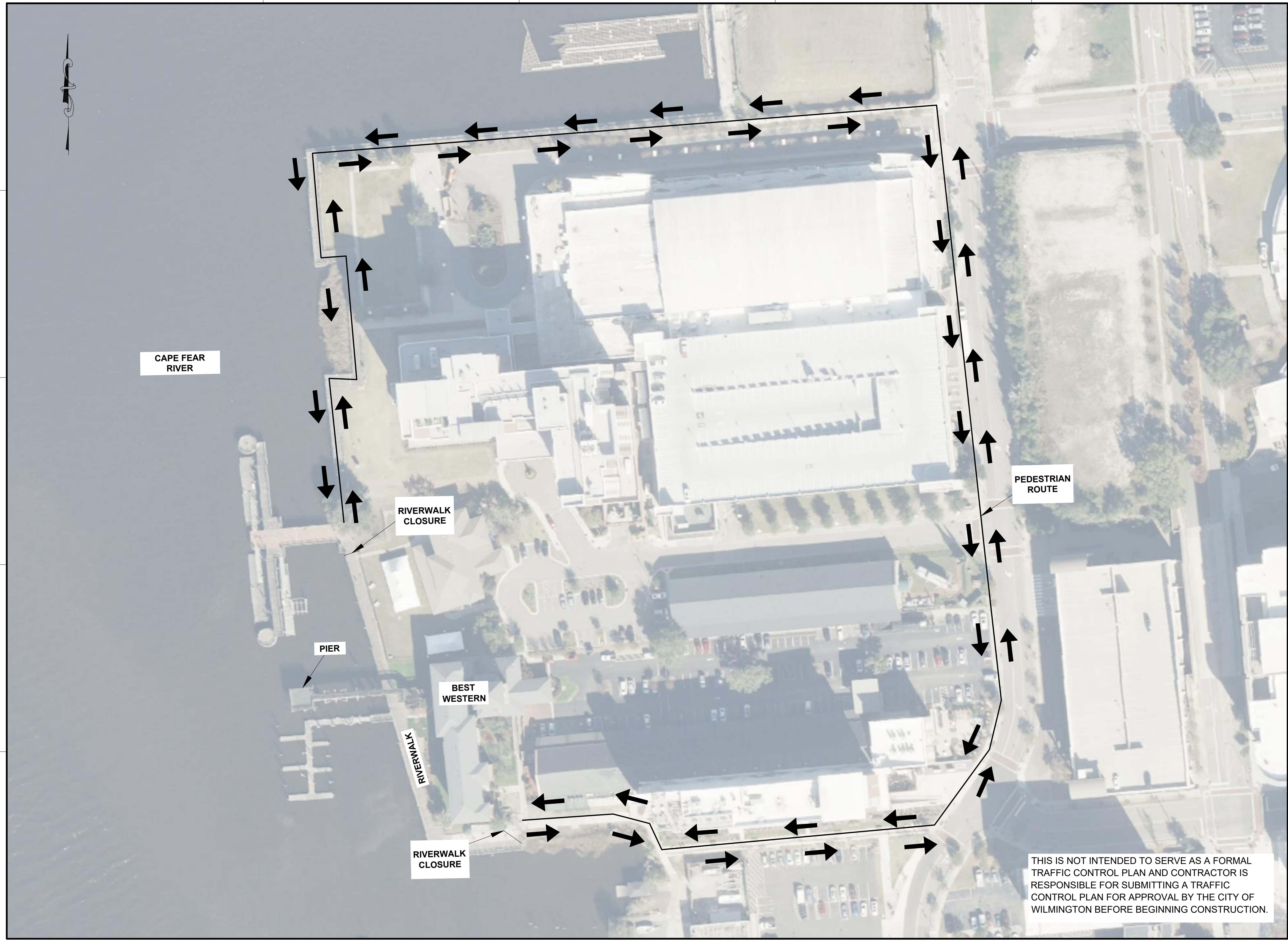

No.	DATE	BY	Description
REVISIONS			
DRAWN BY		NC	
APPROVED BY		TH	
CHECKED BY		TH	
DATE	JULY 2023		

TITLE  
**PHOTO SHEET 3**

PROJECT NO. 50136016

**C203**

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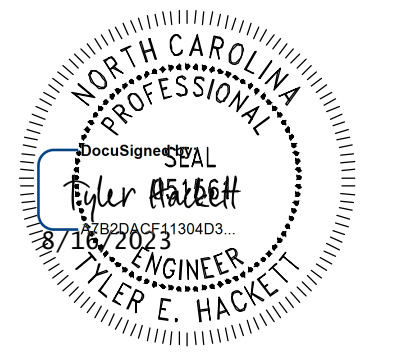


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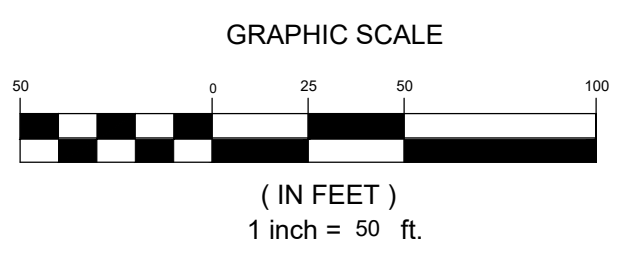


**BEST WESTERN  
 PIER DEMOLITION**  
 CITY OF WILMINGTON, NC

SEAL



KEY PLAN




No.	DATE	BY	Description
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REVISIONS

DRAWN BY: NC

APPROVED BY: TH

CHECKED BY: TH

DATE: JULY 2023

TITLE

**LIMITS OF  
 DEMOLITION AND  
 RIVER WALK  
 CLOSURE**

PROJECT NO. 50136016

# C301

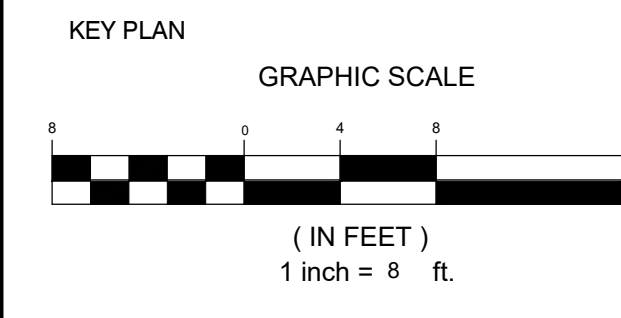
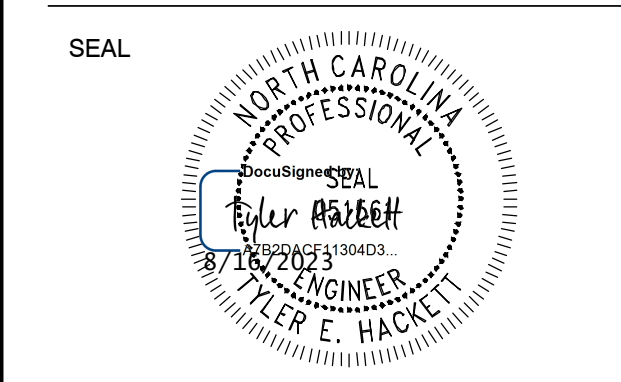
THIS IS NOT INTENDED TO SERVE AS A FORMAL TRAFFIC CONTROL PLAN AND CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE CITY OF WILMINGTON BEFORE BEGINNING CONSTRUCTION.



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**BEST WESTERN  
 PIER DEMOLITION**  
 CITY OF WILMINGTON, NC



No.	DATE	BY	Description

REVISIONS

DRAWN BY: NC  
 APPROVED BY: TH  
 CHECKED BY: TH  
 DATE: JULY 2023

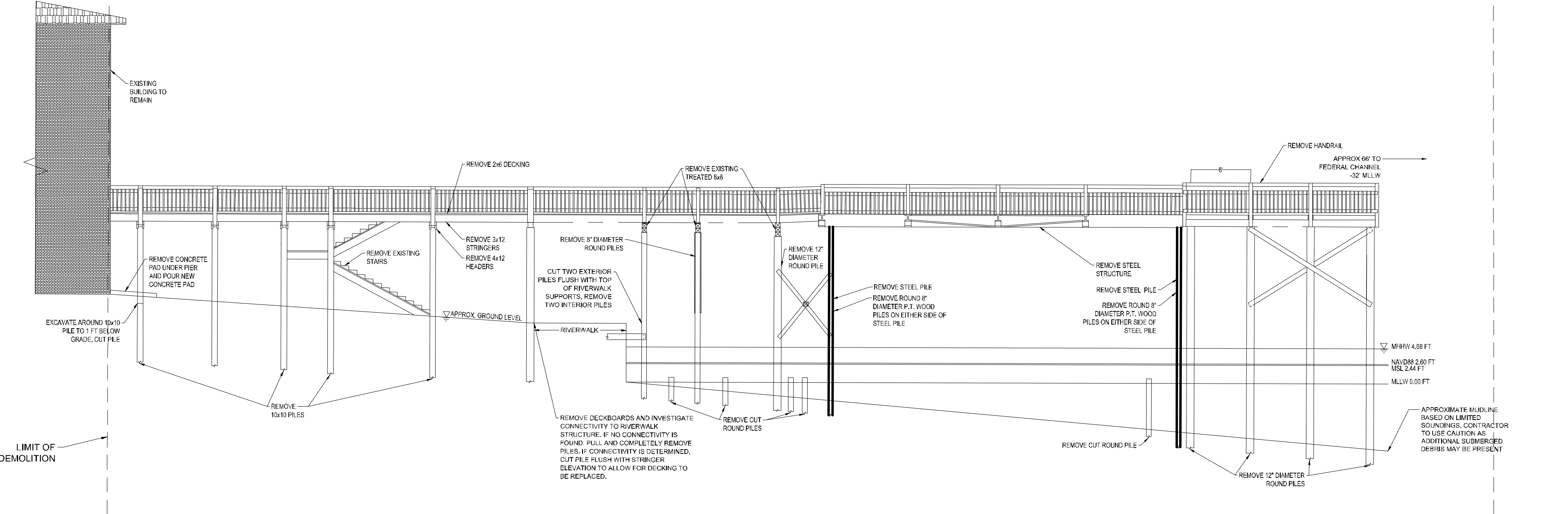
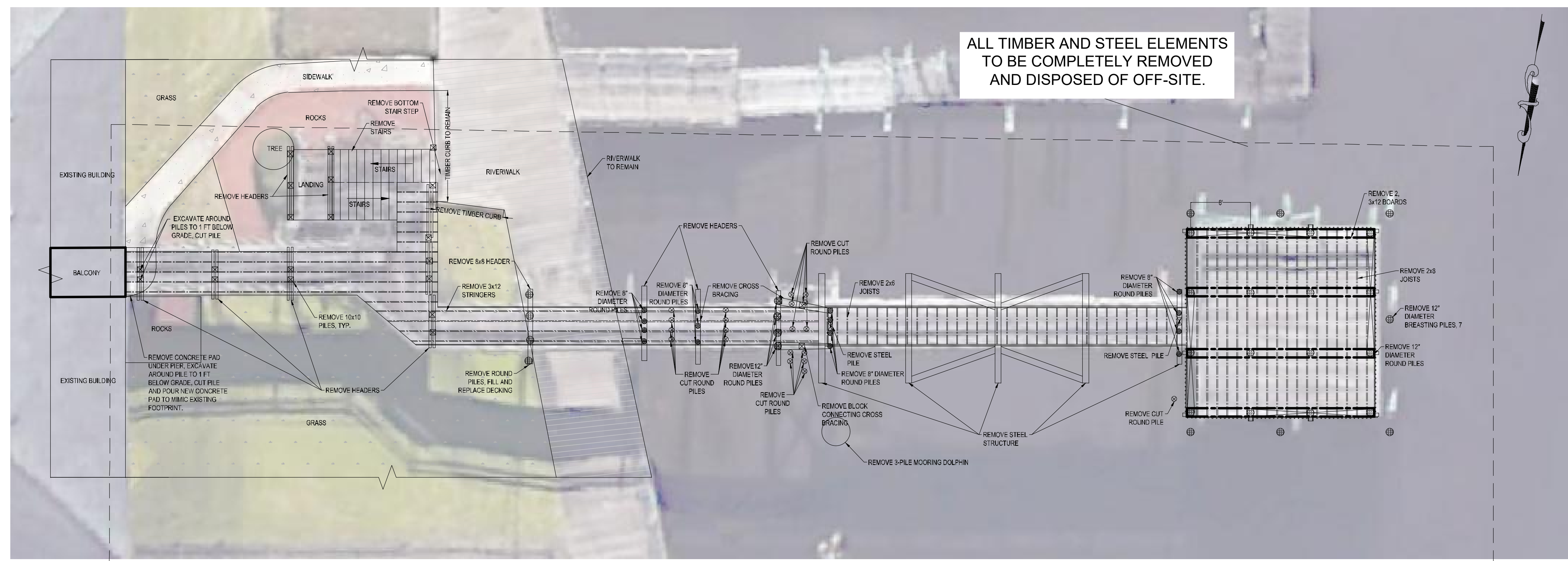
TITLE

## DEMOLITION PLAN AND PROFILE

PROJECT NO. 50136016

# C401

**ALL TIMBER AND STEEL ELEMENTS  
 TO BE COMPLETELY REMOVED  
 AND DISPOSED OF OFF-SITE.**



- NOTES:
- SIZING, SPACING, QUANTITY AND PLACEMENT OF PILES, JOISTS, BOARDS, STRINGERS, RAILING DETAILS, ETC., ARE APPROXIMATE AND WERE ESTIMATED USING BEST JUDGEMENT FROM IMAGERY UNLESS NOTED
  - PILES ARE P.T. WOOD UNLESS NOTED
  - MUDLINE CONTOURS AND UPLAND CONTOURS ARE APPROXIMATE AND BASED ON BEST AVAILABLE DATA AND LIDAR.
  - TIP ELEVATION OF ALL PILES IS UNKNOWN AND SHOWN AS SUCH IN DRAWINGS.
  - CONSTRUCTION METHODOLOGY SHOULD LIMIT POTENTIAL FOR DEBRIS ENTERING WATERWAY TO GREATEST EXTENT POSSIBLE.
  - REVIEW ELECTRICAL PLANS PRIOR TO PILE REMOVAL

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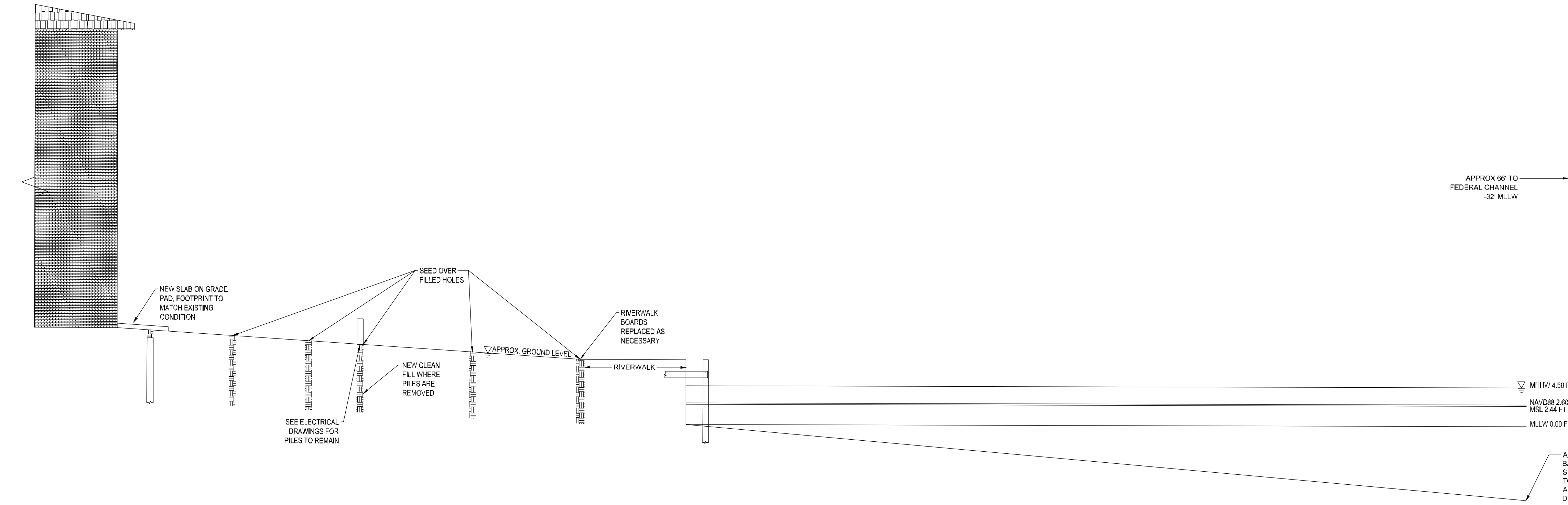
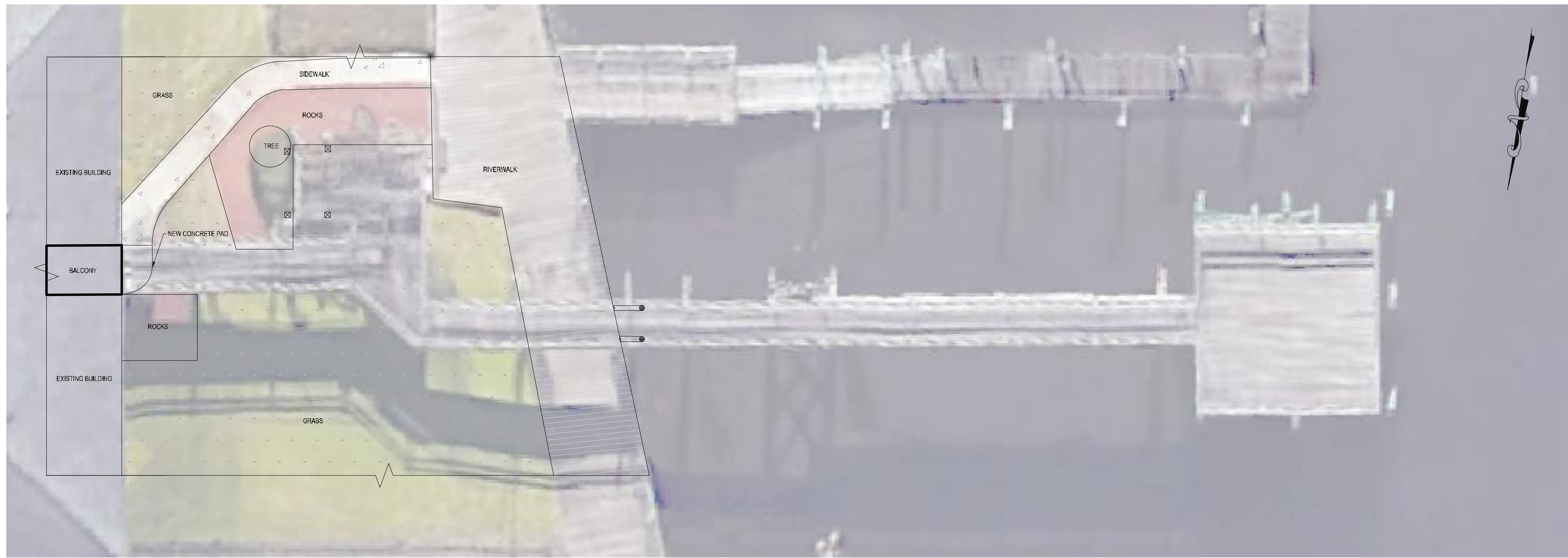
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- NOTES:
1. SIZING, SPACING, QUANTITY AND PLACEMENT OF PILES, JOISTS, BOARDS, STRINGERS, RAILING DETAILS, ETC., ARE APPROXIMATE AND WERE ESTIMATED USING BEST JUDGEMENT FROM IMAGERY UNLESS NOTED
  2. PILES ARE P.T. WOOD UNLESS NOTED
  3. MUDLINE CONTOURS AND UPLAND CONTOURS ARE APPROXIMATE AND BASED ON BEST AVAILABLE DATA AND LIDAR.
  4. TIP ELEVATION OF ALL PILES IS UNKNOWN AND SHOWN AS SUCH IN DRAWINGS.
  5. CONSTRUCTION METHODOLOGY SHOULD LIMIT POTENTIAL FOR DEBRIS ENTERING WATERWAY TO GREATEST EXTENT POSSIBLE.

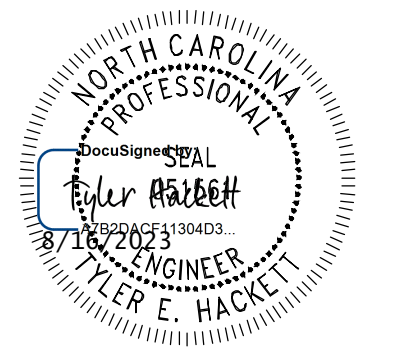


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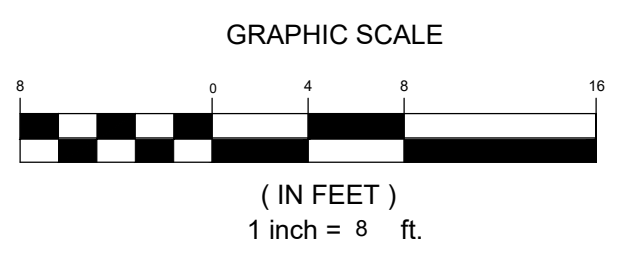


**BEST WESTERN  
 PIER DEMOLITION**  
 CITY OF WILMINGTON, NC

SEAL



KEY PLAN



No.	DATE	BY	Description

REVISIONS

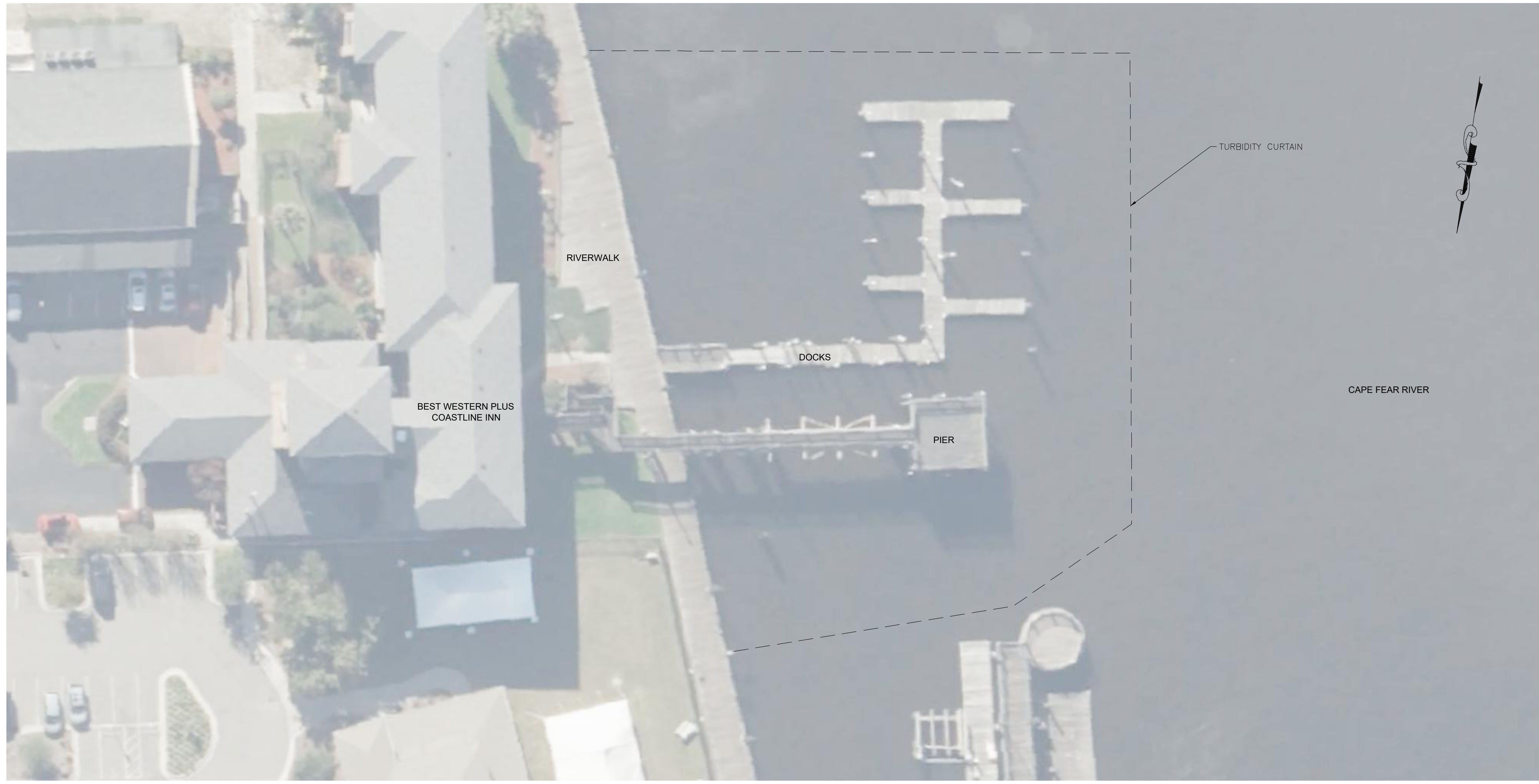
DRAWN BY	NC
APPROVED BY	TH
CHECKED BY	TH
DATE	JULY 2023

TITLE  
**PROPOSED  
 FINAL  
 CONDITIONS**

PROJECT NO. 50136016

**C501**

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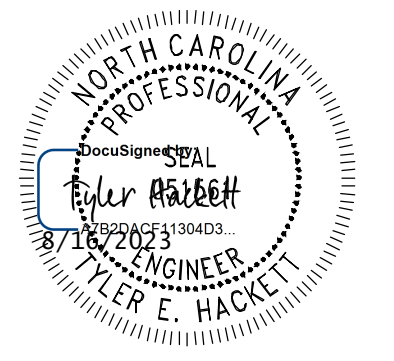


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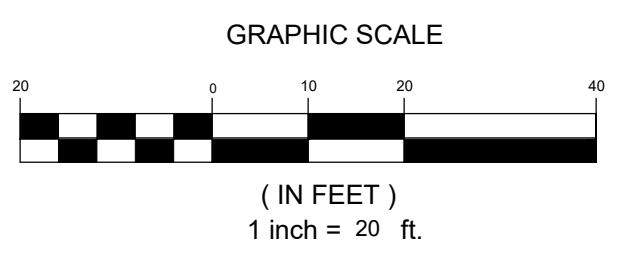


**BEST WESTERN  
 PIER DEMOLITION**  
 CITY OF WILMINGTON, NC

SEAL



KEY PLAN




No.	DATE	BY	Description
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REVISIONS

DRAWN BY NC

APPROVED BY TH

CHECKED BY TH

DATE JULY 2023

TITLE

**TURBIDITY  
 CURTAIN**

PROJECT NO. 50136016

**C601**

NOTES:  
 1. CONSTRUCTION METHODOLOGY SHOULD LIMIT POTENTIAL FOR DEBRIS ENTERING WATERWAY TO GREATEST EXTENT POSSIBLE.



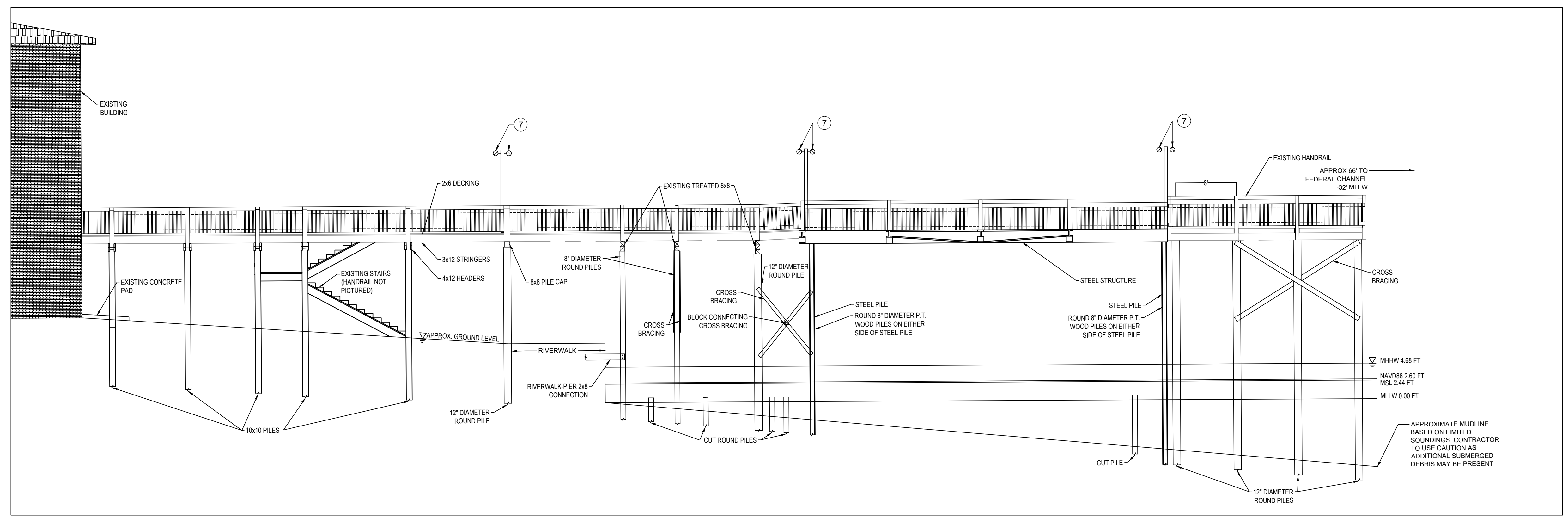
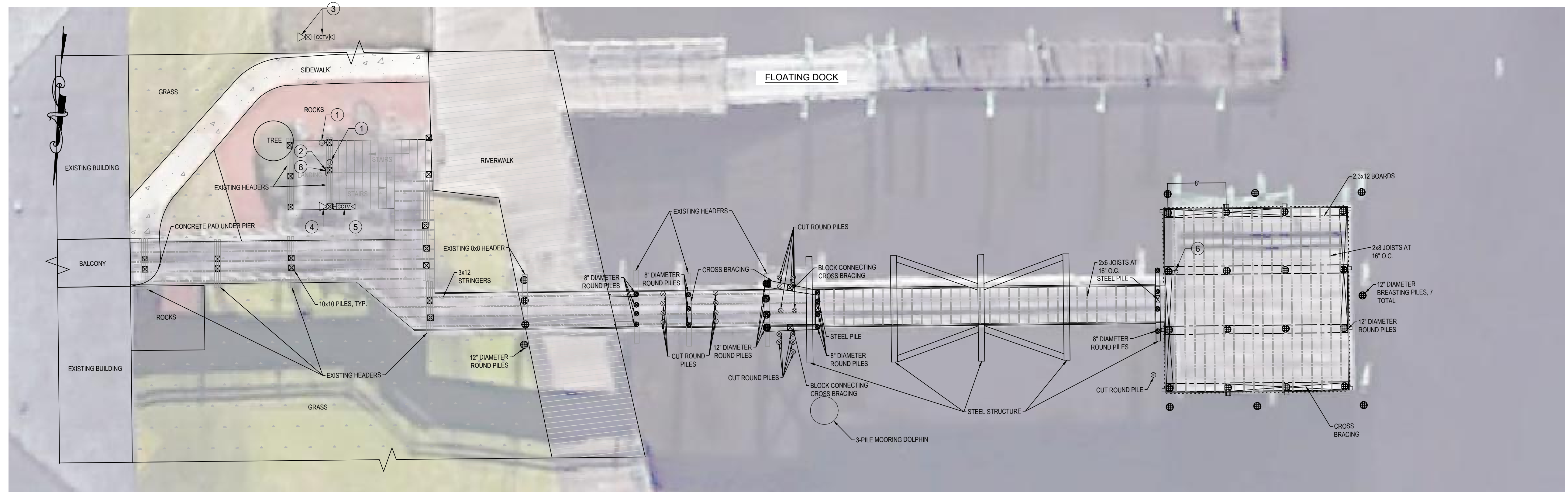
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**KEY NOTES:**

- EXISTING JUNCTION BOX MOUNTED ON 10x10 PILE TO REMAIN. COORDINATE PARTIAL DEMOLITION OF PILE WITH GENERAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. REFER TO DETAIL SHEET E001.
- EXISTING PANELBOARD "P1" MOUNTED ON 10x10 PILE TO REMAIN. COORDINATE PARTIAL DEMOLITION OF PILE WITH GENERAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. PROVIDE NEW UPDATED PANEL DIRECTORY AND TURN SPARE BREAKER TO THE "OFF" POSITION. REFER TO DETAIL SHEET E001.
- EXISTING BEST WESTERN WIRELESS ACCESS POINT AND SECURITY CAMERA TO REMAIN. TYPICAL OF ALL. UON.
- EXISTING WIRELESS ACCESS POINT TO BE REMOVED BY BEST WESTERN PRIOR TO THE START OF CONSTRUCTION.

- EXISTING SECURITY CAMERA AND JUNCTION BOX TO BE REMOVED BY BEST WESTERN PRIOR TO THE START OF CONSTRUCTION.
- EXISTING RECEPTACLE TO BE DEMOLISHED. REMOVE BRANCH CIRCUIT CONDUCTORS TO SOURCE. LABEL BREAKER AS SPARE AND TURN TO THE "OFF" POSITION.
- EXISTING LIGHT FIXTURE TO BE DEMOLISHED. REMOVE BRANCH CIRCUIT CONDUCTORS TO SOURCE. LABEL BREAKER AS SPARE AND TURN TO THE "OFF" POSITION.
- CONTRACTOR SHOULD FIELD VERIFY EX PANEL "P1" SOURCE PANEL AND LABEL PANEL "P1" WITH SOURCE PANEL NAME AND ITS LOCATION.

**GENERAL NOTES:**

- ALL WIRELESS ACCESS POINTS ARE THE PROPERTY OF BEST WESTERN AND EXISTING TO REMAIN. UON. WIRELESS ACCESS POINTS SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
- ALL SECURITY CAMERAS ARE THE PROPERTY OF BEST WESTERN AND EXISTING TO REMAIN. UON. SECURITY CAMERAS SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
- ALL POLE MOUNTED LIGHT FIXTURES ALONG THE RIVERWALK ARE EXISTING TO REMAIN. LIGHT FIXTURES SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
- ALL LIGHT FIXTURES AND RECEPTACLES ON THE FLOATING DOCK ARE EXISTING TO REMAIN. LIGHT FIXTURES AND RECEPTACLES SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.

**DRAWING NOTES:**

- DRAWING NOT TO SCALE: SIZING, SPACING, QUANTITY AND PLACEMENT OF PILES, JOISTS, BOARDS, STRINGERS, RAILING DETAILS, ETC., ARE APPROXIMATE AND WERE ESTIMATED USING BEST JUDGEMENT FROM IMAGERY UNLESS NOTED OTHERWISE.
- DEMOLITION METHODOLOGY SHOULD LIMIT POTENTIAL FOR DEBRIS ENTERING WATERWAY TO GREATEST EXTENT POSSIBLE.



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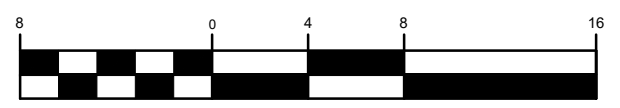
**BEST WESTERN  
 PIER DEMOLITION**  
 CITY OF WILMINGTON, NC

SEAL



KEY PLAN

GRAPHIC SCALE



(IN FEET)  
1 inch = 8 ft.

No.	DATE	BY	Description

REVISIONS

DRAWN BY	PHD
APPROVED BY	POA
CHECKED BY	POA
DATE	AUGUST 2023

TITLE

**ELECTRICAL  
 DEMOLITION  
 PLAN AND  
 PROFILE**

PROJECT NO. 50136016

**E101**