Project No. 24001

Specifications For

GREENVILLE AVE BEACH ACCESS



Atlantic Beach, NC



Coastal Architecture 4206 Bridges Street Ext., Suite C Morehead City, NC 28557 252-247-2127

Date of Issue: 14 January 2025

PDF processed with CutePDF evaluation edition www.CutePDF.com

Project Manual

Including

Bid Proposal, Contract Documents & Specifications

For the Construction of

Greenville Ave Beach Access Atlantic Beach, NC

PREPARED BY:

Coastal Architecture 4206 Bridges Street Extension, Suite c Morehead City, NC 28557 252-247-2127

Architect's Project Number: 24001

Date of Issue: 01/14/25



TABLE OF CONTENTS

SPECIFICATIONS FOR

GREENVILLE AVE BEACH ACCESS ATLANTIC BEACH, NORTH CAROLINA

SPECIFICATIONS

DIVISION 0 - BIDDING REQUIREMENTS AND GENERAL CONDITIONS

- Sections ------ Table of Contents ------ Invitation for Bid ------ Informal Contract ------ General Conditions
 - ------ Supplementary General Conditions
 - ----- Proposal and Contract
 - ----- Froposal and Contract

DIVISION 1 - GENERAL REQUIREMENTS

- Sections 01010 Summary of Work
 - 01027 Applications for Payment
 - 01045 Cutting and Patching
 - 01090 Abbreviations and Symbols
 - 01200 Project Meetings
 - 01310 Schedules and Reports
 - 01340 Submittals and Substitutions
 - 01370 Schedule of Values
 - 01500 Temporary Facilities and Controls
 - 01710 Cleaning

DIVISION 2 - SITE WORK

SEE PLANS

DIVISION 3 - CONCRETE

Sections Not Applicable

DIVISION 4 - MASONRY

Sections Not Applicable

DIVISION 5 - METALS

Sections Not Applicable

DIVISION 6 - CARPENTRY

SEE PLANS

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

Sections Not Applicable

DIVISION 8 - DOORS AND WINDOWS

Sections Not Applicable

DIVISION 9 - FINISHES

Sections Not Applicable

DIVISION 10 - SPECIALTIES

Sections Not Applicable

DIVISION 11 - EQUIPMENT

Sections Not Applicable

DIVISION 12 - FURNISHINGS

Sections Not Applicable

DIVISION 13 - SPECIAL CONSTRUCTION

Sections Not Applicable

DIVISION 14 - CONVEYING SYSTEMS

Sections Not Applicable

DIVISION 15A - PLUMBING Sections Not Applicable

DIVISION 15B - MECHANICAL

Sections Not Applicable

DIVISION 16 - ELECTRICAL

Sections Not Applicable

INVITATION TO BID

BIDS for the construction of the Greenville Ave. Beach Access will be received by the Town of Atlantic Beach at the Public Services Building in Atlantic Beach, until 2:00 pm on February 06, 2025.

The CONTRACT DOCUMENTS may be obtained from Architects website, <u>www.coastalarchitecture.net</u> or purchased from the Architect for a sum of \$75.00 per set. (Non Refundable)

The Owner reserves the unqualified right to reject any and/or all bids.

Bids are to be delivered to Town of Atlantic Beach.

Town of Atlantic Beach 125 W Fort Macon Rd Atlantic Beach, NC 28512

A Bid Bond will not be required, and a 100% Performance and Payment Bond will not be required.

INFORMAL CONTRACT

For

GREENVILLE AVE. BEACH ACCESS

Atlantic Beach, NC

SCOPE OF WORK

New Beach Access; elevated wooden walkways, ramps, etc. Greenville Ave.. Atlantic Beach, NC

NOTICE TO BIDDER

Complete plans and specification and contract documents can be obtained from



Coastal Architecture, pllc 4206 Bridges Street Extension, Suite C Morehead City, NC 28557 252-247-2127 www.coastalarchitecture.net Lee@coastalarchitecture.net

Plans are also available from www.atlanticbeach-nc.com

Contractors are hereby notified that they must have proper license under the State laws governing their respective trades and that North Carolina General Statute 87 will be observed in receiving and awarding contracts. General Contractors must have general license classification for <u>General Construction</u>.

A bid bond, performance bond, and payment bond are <u>not</u> required.

No bid may be withdrawn after the receipt of proposal for a period of 45 days. The Owner reserves the right to reject any or all proposals and waive informalities. Proposals shall be made only on the form provided herein with all blank spaces for bids properly filled in and all signatures properly executed.

Please note on the envelope - Beach Accesses Bid Proposal:

Attn:

Town of Atlantic Beach (Bid Date) (Contractor) (License Number)

GENERAL CONDITIONS

GENERAL

It is understood and agreed that by submitting a bid that the Contractor has examined these contract documents, drawings and specifications and has visited the site of the Work and has satisfied himself relative to the Work to be performed.

MATERIALS, EQUIPMENT AND EMPLOYEES

The contractor shall, unless otherwise specified, supply and pay for all labor, transportation, materials, tools, apparatus, lights, power, fuel, sanitary facilities and incidentals necessary for the completion of his work, and shall install, maintain and remove all equipment of the construction, other utensils or things, and be responsible for the safe, proper and lawful construction, maintenance and use of same, and shall construct in the best and most workmanlike manner, a complete job and everything incidental thereto, as shown on the plans, stated in the specifications, or reasonably implied there from, all in accordance with the contract documents.

All materials shall be new and of quality specified, except where reclaimed material is authorized herein and approved for use. Workmanship shall at all times be of a grade accepted as the best practice of the particular trade involved, and as stipulated in written standards of recognized organizations or institutes of the respective trades except as exceeded or qualified by the specifications.

No changes shall be made in the Work except upon written approval and change order of the Designer/Owner. Change orders shall be subject to provisions in the current North Carolina Construction Manual.

Products are generally specified by ASTM or other reference standard and/or by manufacturer's name and model number or trade name. When specified only by reference standard, the Contractor may select any product meeting this standard, by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the Contractor has the option of using any product and manufacturer combination listed.

However, the contractor shall be aware that the cited examples are used only to denote the quality standard of product desired and that they do not restrict bidders to a specific brand, make, manufacturer or specific name; that they are used only to set forth and convey to bidders the general style, type, character and quality of product desired; and that equivalent products will be acceptable. Substitution of materials, items or equipment of equal or equivalent design shall be submitted to the architect or engineer for approval or disapproval; such approval or disapproval shall be made by the architect or engineer prior to the opening of bids.

If at any time during the construction and completion of the work covered by these contract documents, the conduct of any workman of the various crafts be adjudged a nuisance to the Owner or if any workman be considered detrimental to the work, the Contractor shall order such parties removed immediately from the site.

The contractor shall designate a foreman/superintendent who shall direct the work.

CODES, PERMITS AND INSPECTIONS

The Contractor shall obtain the required permits, if required, give all notices, and comply with all laws, ordinances, codes, rules and regulations bearing on the conduct of the work under this contract. If the Contractor observes that the drawings and specifications are at variance therewith, he shall promptly notify the Designer in writing. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, codes, rules and regulations, and without such notice to the Owner, he shall bear all cost arising there from.

All work under this contract shall conform to the current North Carolina Building Code and other state and national codes as are applicable

Projects constructed by the State of North Carolina or by any agency or institution of the State are not subject to county or municipal building codes and may* not be subject to inspection by county or municipal authorities. The Contractor shall, however, cooperate with the county or municipal authorities by obtaining building permits. Permits may be obtained by the contractor at no cost to the owner.

*Inspection and certification of compliance by local authorities is necessary if an architect or engineer was <u>not</u> employed on the project, or if the plans and specifications were not approved and the construction inspected by the State Construction Office.

SAFETY REQUIREMENTS

The Contractor shall be responsible for the entire site and the construction of the same and provide all the necessary protections as required by laws or ordinances governing such conditions and as required by the Owner or Designer. He shall be responsible for any damage to the Owner's property, or that of others on the job, by himself, his personnel or his subcontractors, and shall make good such damages. He shall be responsible for and pay for any claims against the Owner arising from such damages.

The Contractor shall adhere to the rules, regulations and interpretations of the North Carolina Department of Labor relating to Occupational Safety and Health Standards for the Construction Industry (Title 29, Code of Federal Regulations, Part 1926 published in Volume 39, Number 122, Part 11, June 24, 1974 Federal Register), and revisions thereto as adopted by General Statutes of North Carolina 95-126 through 155.

The Contractor shall provide all necessary safety measures for the protection of all persons on the work, including the requirements of the AGC Accident Prevention Manual in Construction as amended, and shall fully comply with all state laws or regulations and North Carolina Building Code requirements to prevent accident or injury to persons on or about the location of the work. He shall clearly mark or post signs warning of hazards existing and shall barricade excavations and similar hazards. He shall protect against damage or injury resulting from falling materials and he shall maintain all protective devices and signs throughout the progress of the work.

TAXES

Federal Excise Taxes do not apply to materials entering into State work (Internal Revenue Code, Section 3442(3)).

Federal Transportation Taxes do not apply to materials entering into State work (Internal Revenue Code, Section 3475 (b) as amended).

North Carolina Sales Taxes and Use Tax do apply to materials entering into State Work (N.C. Sales and Use Tax Regulation No. 42, Paragraph A), and such costs shall be included in the bid proposal and contract sum.

Local Option Sales and Use Taxes do apply to materials entering into State work as applicable (Local Option Sales and Use Tax Act, Regulation No. 57), and such cost shall be included in the bid proposal and contract sum.

ACCOUNTING PROCEDURES FOR REFUND OF COUNTY SALES & USE TAX

(THIS SECTION ONLY APPLIES TO STATE OWNED PROJECTS)

Contractors for <u>State owned projects</u> shall provide the owner a signed statement containing the information listed in G.S. 105-164.14(e) for all materials purchased for the project.

The Department of Revenue has agreed that in lieu of obtaining copies of sales receipts from contractors, an agency may obtain a certified statement from the contractor setting forth the date, the type of property and the cost of the property purchased from each vendor, the county in which the vendor made the sale and the amount of local sales and use taxes paid thereon. If the property was purchased out-of-state, the county in which the property was delivered should be listed. The contractor should also be notified that the certified statement may be subject to audit.

In the event the contractors make several purchases from the same vendor, such certified statement must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices, the counties, and the county sales and use taxes paid thereon.

Name of taxing county: The position of a sale is the retailer's place of business located within a taxing county where the vendor becomes contractually obligated to make the sale. Therefore, it is important that the county tax be reported for the county of sale rather than the county of use.

When property is purchased from out-of-state vendors and the county tax is charged, the county should be identified where delivery is made when reporting the county tax.

Such statement must also include the cost of any tangible personal property withdrawn from the contractor's warehouse stock and the amount of county sales or use tax paid thereon by the contractor.

Similar certified statements by his subcontractors must be obtained by the general contractor and furnished to the claimant.

Contractors are not to include any tax paid on supplies, tools and equipment which they use to perform their contracts and should include only those building materials, supplies, fixtures and equipment which actually become a part of or annexed to the building or structure.

EQUAL OPPORTUNITY

The non-discrimination clause contained in Section 202 (Federal) Executive Order 11246, as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race,

color, religion, sex or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor, are incorporated herein.

The Contractors agree not to discriminate against any employees or applicant for employment because of physical or mental handicap in regard to any position for which the employees or applicant is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices.

INSURANCE

The Contractor shall not commence work until he has obtained all insurance required, and the Owner has approved such insurance, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been obtained.

The Contractor shall provide and maintain during the life of this contract Workmen's Compensation Insurance for all employees employed at the site of the project under his contract.

The Contractor shall provide and maintain during the life of this contract such Public Liability and Property Damage Insurance as shall protect him and any subcontractor performing work covered by this contract, from claims for damage for personal injury, including accidental death, as well as from claims for property damages which may arise from operations under this contract, whether such operation be by the Contractor himself or by any subcontractor, or by anyone directly or indirectly employed by either of them and the amounts of such insurance shall be as follows:

Public Liability Insurance in an amount not less than \$300,000 for injuries, including accidental death, to any one person and subject to the same limit for each person, in amount not less than \$500,000 on account of one accident; and Property Damage Insurance in an amount not less that \$100,000/\$300,000.

The Contractor shall furnish such additional insurance as may be required by General Statutes of North Carolina, including motor vehicle insurance in amounts not less than statutory limits.

Each Certificate of Insurance shall bear the provision that the policy cannot be canceled, reduced in amount or coverage eliminated in less than fifteen (15) days after mailing written notice to the insured and/or the Owner of such alteration or cancellation, sent by registered mail.

The Contractor shall furnish the Owner with satisfactory proof of carriage of the insurance required before written approval is granted by the Owner.

INVOICES FOR PAYMENT

Partial payments will be made monthly with a 10 % retainage. Final payment will be made lump sum within fortyfive (45) consecutive days after acceptance of the work and the submission both of notarized contractor's affidavit and four copies of AIA Request for Payment which are to include the contract, account and job order numbers.

The contractor's affidavit shall state: "This is to certify that all costs of materials, equipment, labor, and all else entering into the accomplishment of this contract, including payrolls, have been paid in full."

Executed contract documents, insurance certifications and, upon completion and acceptance of the work, invoices and other information requested are to be sent to:

Mr. Lee Dixon, AIA Coastal Architecture 4206 Bridges Street Extension, Suite C 252-247-2127 Lee@coastalarchitecture.net

It is imperative that contract documents, invoices, etc., be sent only to the above address in order to assure proper and timely delivery and handling.

CLEANING UP

The Contractor shall keep the sites and surrounding area reasonably free from rubbish at all times and shall remove debris from the site from time to time or when directed to do so by the Owner. Before final inspection and acceptance of the project, the Contractor shall thoroughly clean the sites, and completely prepare the project and site for use by the Owner.

GUARANTEE

The contractor shall unconditionally guarantee materials and workmanship against patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve (12) months following the final acceptance of the work and shall replace such defective materials or workmanship without cost to the owner.

Where items of equipment or material carry a manufacturer's warranty for any period in excess of twelve (12) months, then the manufacturer's warranty shall apply for that particular piece of equipment or material. The contractor shall replace such defective equipment or materials, without cost to the owner, within the manufacturer's warranty period.

Additionally, the owner may bring an action for latent defects caused by the negligence of the contractor, which is hidden or not readily apparent to the owner at the time of beneficial occupancy or final acceptance, whichever occurred first, in accordance with applicable law.

Guarantees for roofing workmanship and materials shall be stipulated in the specification's sections governing such roof, equipment, materials, or supplies.

CONTRACTOR-SUBCONTRACTOR RELATIONSHIPS

The Contractor agrees that the terms of these contract documents shall apply equally to a subcontractor as to the Contractor, and that the subcontractor is bound by those terms as an employee of the Contractor.

SUPPLEMENTARY GENERAL CONDITIONS

TIME OF COMPLETION

The Contractor shall commence work to be performed under this Contract on a date to be specified in written order from the Designer and shall fully complete all work hereunder within (<u>75</u>) consecutive calendar days from the Notice to Proceed for base bid contract for each site. For each day in excess of the above number of days, the Contractor shall pay the Owner the amount of <u>One Hundred Fifty</u> Dollars (<u>\$150.00</u>) as liquidated damages reasonably estimated in advance to cover the losses to be incurred by the Owner should the Contractor fail to complete the Work within the time specified.

If the Contractor is delayed at anytime in the progress of his work by any act or negligence of the Owner, his employees or his separate contractor, by changes ordered in the work; by abnormal weather conditions; by any causes beyond the Contractor's control or by other causes deemed justifiable by Owner, then the contract time may be reasonably extended in a written order from the Owner upon written request from the contractor within ten days following the cause for delay.

UTILITIES

Contractor to provide all temporary utilities required for the construction of this project

SECURITY

The contractor is responsible for security of the jobsite.

USE OF SITE

Coordinate with Owner all working schedules.

PROPOSAL AND CONTRACT

For:

Greenville Ave. Beach Access Atlantic Beach, NC Project # 24001

The undersigned, as bidder, proposes and agrees if this proposal is accepted to contract with the Town of Atlantic Beach for the furnishing of all materials, equipment, and labor necessary to complete the construction of the work described in these documents in full and complete accordance with plans, specifications, and contract documents, and to the full and entire satisfaction of the Town of Atlantic Beach and the architect for the sum of:

BASE BID:	Dollars \$	
Respectively submitted this	day of	20
(Contractor)	
Federal ID#:	By <u>:</u>	
Witness:	Title:(Owner, partner, corp. Pres. Or Vice I	
(Proprietorship or Partnership)	Address:	President)
Attest: (corporation)	Email Address:	
(Corporate Seal)		
Ву:	License #:	
Title: (Corporation Secretary/ Ass't Secretary.)		
ACCEPTED	by the Town of Atlantic Beach Through the	
	(Agency/Institution)	
BY:	TITLE:	
DATE:, 20		

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Project description
 - 2. Applicable regulatory requirements
 - 3. Access to the site
 - 4. Contractor's use of the premises
 - 5. Coordination requirements
- B. Related Documents:
 - 1. Division 0 Bidding and General Conditions, Division 1 General Requirements, all applicable provisions in the technical specification's sections of Divisions 2 through 16 and applicable drawings apply to this section.

1.2 PROJECT DESCRIPTION

- A. The project consists of a new Beach access
 - 1. As shown in contract documents.
- B. The work consists of:
 - 1. New beach access, including walkways, ramps, handrails, guardrails, decking, railing, and minor grading.

1.3 PRIME CONTRACTS

A. The work will be bid as one Single Prime Informal Contract.

1.4 REGULATORY REQUIREMENTS

- A. The following regulations are applicable to this project:
 - 1. North Carolina State Building Code, current edition.
 - 2. This Project is in the Inspections jurisdiction of Atlantic Beach and CAMA
 - 3. Submit copies of all licenses, and similar permissions obtained and receipts for fees paid, to the Architect, upon request.

1.5 ACCESS TO THE SITE AND USE OF THE PREMISES

- A. Limited Space will be available to the Contractor for the performance of the work.
- B. Limited Storage and staging areas will be available on site.
- C. Signs: Provide signs adequate to direct visitors.
 - 1. Do not install, or allow to be installed, signs other than specified sign(s) and signs identifying the principal entities involved in the project.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 PRE-CONSTRUCTION MEETING

A. A Pre-Construction meeting will be held.

3.2 SECURITY PROCEDURES

- A. Limit access to the site work area to persons involved in the work.
- B. Provide secure storage for materials for which the Owner has made payment and which are stored on site.
- C. Secure completed work as required to prevent loss.

3.3 COORDINATION

1.

- A. A monthly meeting may be held, for the specific purpose of coordination, at the site.
 - Attendees shall include:
 - a. Representative of the General Contractor.
 - b. Subcontractors currently working at the site, if necessary.
 - c. Owner's representative.
 - d. Architect
- B. The General Contractor is responsible for coordination of all products/materials, installations, in the Single Prime scenario.
 - 1. Prepare coordination drawings as needed for separate products.
 - 2. Where space is limited, show plan and cross-section dimensions of space available.
 - 3. Coordinate shop drawings prepared by separate entities.
 - 4. Show installation sequence when necessary for proper installation.

END OF SECTION 01010

SECTION 01027 - PAYMENT, MODIFICATION, AND COMPLETION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Payment procedures.
 - 2. Modification procedures.
 - 3. Completion procedures.
- B. Related Documents:
 - 1. Division 0 Bidding and General Conditions, Division 1 General requirements, all applicable provisions in the technical specification sections of Divisions 2 through 16 and applicable drawings apply to this section.
- C. Related Requirements Specified Elsewhere in the Project Manual:
 - 1. Project Record Documents, Division 1.
 - 2. Schedule of Values, Division 1.

1.2 CONTRACT CONDITIONS

- A. See the General Conditions of the Contract for additional requirements.
- B. The Owner will retain from each progress payment an amount equal to 10 percent of the value of the work covered by the progress payment.
- C. At substantial completion the Contractor may apply for release of retainage sufficient to bring the total of payments to 90 percent of the contract sum, less those amounts that are withheld to cover incomplete or incorrect work and unsettled claims, as defined elsewhere.
- D. No payment will be made for materials or equipment stored off site.
- E. Payments may be withheld if the contractor fails to make dated submittals within the time periods specified.

1.3 DEFINITIONS

- A. Request for Pricing (R.F.P.): Any written request from the Owner or Architect to the contractor for a quotation, price, or breakdown on a change proposed but not ordered.
- B. Final Completion: The stage at which all incomplete and incorrect work has been completed or corrected in accordance with the contract documents.
- C. List of Incomplete Work: A comprehensive list of items to be completed or corrected, prepared by the contractor for the purpose of obtaining certification of substantial completion. This list is also referred to as a "punch list."
- D. Modifications: Any written amendments to the contract, such as change orders.
- E. Schedule of Values: A detailed breakdown of the contract sum into individual cost items, which will serve as the basis for evaluation of applications for progress payments during construction. Line items shall be broken down into Materials and Labor and rounded to the nearest dollar.
- F. Substantial Completion: The time at which the work, or a portion of the work which the owner agrees to accept separately, is sufficiently complete in accordance with the contract documents so that the owner can occupy or use the work for its intended purpose.

1.4 SUBMITTALS

- Schedule of Values: Must be submitted for review by Single Prime Contractor prior to submitting first Application Α. for Payment. First application for payment will not be reviewed without approved schedule of values.
- Β. Applications for Payments: Submit sufficiently in advance of date established for the progress payment to allow for the processing indicated.
- PART 2 PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 SCHEDULE OF VALUES See Section 01370
 - Contractor shall prepare a schedule of values for his work. Α.

3.2 APPLICATIONS FOR PAYMENT

- Application for Payment Forms: Use AIA original current editions of G702, Application and Certificate for Payment, Α. and AIA G703, Continuation Sheet, or a similar electronic format with the same information.
- Β. Preparation of Applications for Payment: Complete form entirely.
 - Make current application consistent with previous applications, certificates for payment, and payments 1. made.
 - 2. Base the application on the current schedule of values, and work completed or stored on site only.
 - 3. Include the amounts of modifications issued before the end of the construction period covered by the application.
 - 4. Include the signature by person authorized by the contractor to sign legal documents.
 - Notarize each copy. 5.
 - Submit in 4 copies. 6.
 - Submit Sales Tax report form as required. 7.
- C. Transmit application for payment with a transmittal form itemizing supporting documents attached.
 - Transmit to the Architect. 1.

3.3 WAIVERS OF LIEN

- Α. With final application for payment, submit complete waivers of lien from every entity who may be legally entitled to file a mechanic's or other lien against the work.
- Β. Contractor's Affidavit of Release of Liens Forms: Use AIA form G706A.

3.4 FIRST PAYMENT PROCEDURE

- Α. The first application for payment will not be reviewed until the following submittals have been received: 1.
 - Certificates of insurance.
 - 2 Schedule of Values.
 - 3 List of subcontractors, principal suppliers, and fabricators.
 - 4 Contractor's construction schedule.
 - 5 All submittals specified to occur prior to first application for payment or prior to first payment.

3.5 MODIFICATION PROCEDURES

Α. Designate a single individual authorized to receive change documents and who will be responsible for informing others of changes to the work.

- B. Changes in cost resulting from modifications shall include only those costs specified elsewhere in the contract documents.
- C. When requested in writing, the contractor shall provide sufficient information for evaluation of proposed changes within 14 days.
- D. Provide the following information for every change proposal request:
 - 1. The amount of change in the contract sum, if any.
 - 2. The amount of change in the contract time, if any, with explanation.
 - 3. Cost breakdown, using schedule of values line items, separated into material and labor costs, additions and deletions, and with overhead and profit handled in the same manner as specified for the schedule of values.
 - 4. The period of time within which the proposed changes in contract sum or time will be valid.
 - 5. A statement describing the effect the change may have on the work of other prime contractors.
 - 6. Upon request, provide the following information:
 - a. Quantities and unit costs of products, labor, and equipment.
 - b. Taxes, insurance, and bonds.
 - c. Overhead and profit.
 - 3.6 SUBSTANTIAL COMPLETION PROCEDURES
 - A. Request for inspection and application for payment may coincide.
 - B. The Architect will perform one inspection for substantial completion, upon request of the Contractor.
 - 1. If the Architect is unable to issue the certificate of substantial completion because the work is not considered to be substantially complete, the Contractor shall pay all subsequent inspection costs, including compensation for the Architect's services and expenses.
 - 2. Only one certificate of substantial completion will be issued, for the entire project.
 - C. Submit the following with application for payment following substantial completion:
 - 1. Contractor's affidavit of release of liens.
 - 2. Meter readings of all utilities services for which the Contractor has been paying.
 - 3. Request for reduction or release of retainage.
 - 4. Consent of Surety to reduction in or partial release of retainage.
 - 5. Final list of incomplete work.
 - 6. Other data required by the contract documents.
 - 3.7 FINAL COMPLETION PROCEDURES
 - A. Request for final inspection and final application for payment may coincide.
 - B. The Architect will perform one inspection for final completion, upon request of the Contractor.
 - 1. Submit the following with request for inspection:
 - a. Previous inspection lists indicating completion of all items.
 - b. If any items cannot be completed, obtain prior approval of such delay.
 - 2. If the Architect is unable to issue the certificate for final payment because the work is not complete, the <u>Contractor shall pay all subsequent inspection costs</u>, including compensation for the Architect's services and expenses.
 - C. Submit the following with the final application for payment:
 - 1. Certified copy of the previous list of items to be completed or corrected, stating that each has been completed or otherwise resolved for acceptance.
 - 2. Updated final statement, accounting for final changes to the contract sum.
 - 3. Consent of Surety to Final Payment.
 - 4. Meter readings of all utilities services for which the Contractor has been paying after

substantial completion.

- 5. Certification that financial obligations to governing authorities and public utilities have been fulfilled.
- 6. Description of unsettled claims.
- 7. Owner's Manuals and Warranties.
- 8. Any other data required by the contract documents.

END OF SECTION 01027

SECTION 01045 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: This Section establishes general requirements pertaining to cutting (including excavating), fitting, and patching of the Work required to:
 - 1. Make the several parts fit properly.
 - 2. Uncover work to provide for installing, inspection, or both, of ill-timed work.
 - 3. Remove and replace work not conforming to requirements of the Contract Documents; and
 - 4. Remove and replace defective work.
- B. Related work:
 - 1. In addition to other requirements specified, upon the Architect's request, uncover work to provide for inspection by the Architect of covered work, and remove samples of installed materials for testing.
 - 2. Do not cut or alter work performed under separate contracts without the Architect's written permission.
 - 3. See Article 12 of General Conditions of the Contract for Construction.

1.2 SUBMITTALS

- A. Request for Architect's consent:
 - 1. Prior to cutting which effects structural safety, submit written request to the Architect for permission to proceed with cutting.
 - 2. Should conditions of the Work, or Schedule, indicate a required change of materials or methods for cutting and patching, so notify the Architect and secure his written permission and the required Change Order prior to proceeding.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. For replacement of items removed, use materials complying with pertinent Sections of these Specifications.
- B. All concrete patching to be done with low moisture, non-shrink grout.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

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

3.2 PREPARATION PRIOR TO CUTTING

A. Provide required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the Work.

3.3 PERFORMANCE

- A. Perform required excavating and backfilling as required under pertinent other Sections of these Specifications.
 - 1. Perform cutting and demolition by methods which will prevent damage to other portions of the Work and provide proper surfaces to receive installation of repair and new work.
 - 2. Perform fitting and adjusting of products to provide finished installation complying with the specified tolerances and finishes.

END OF SECTION 01045

SECTION 01090 - ABBREVIATIONS AND SYMBOLS

PART 1 - GENERAL

1.1 REFERENCE TO APPLICABLE STANDARDS

- A. Wherever reference is made to Codes, Standards Specifications or other data published by regulating agencies or accepted organizations, it shall be understood that such reference is made to the latest edition, (including addenda) published prior to the date of Contract Documents, except as noted specifically otherwise by date in the contract documents.
- B. Abbreviations and symbols used in the Specifications can be grouped into three (3) basic categories:
 - 1. Abbreviations of reference symbols.
 - 2. Abbreviations of words and phrases.
 - 3. Symbols.
- C. Among those which may be used in the Contract Documents are the following (with respective abbreviation used):

	AA	Aluminum Association
	AAMA	Architectural Aluminum Manufacturers Association
	AASHTO	American Association of State Highway and Transportation
		Officials
	ABMA	American Boiler Manufacturers Association
	ACI	American Concrete Institute
	ACRI	Air Conditioning and Refrigeration Institute
	ADC	Air Diffusion Council
	AFI	Air Filter Institute
	AGA	American Gas Association
	AGCA	Associated General Contractors of America, Inc.
	AIA	American Institute of Architects
	AIMA	Acoustical and Insulating Materials Association
	AISC	American Institute of Steel Construction
	AISI	American Iron and Steel Institute
	AITC	American Institute of Timber Construction
	ALS	American Lumber Standards
	AMCA	Air Moving and Conditioning Association
	ANSI	American National Standards Institute, Inc.
	APA	American Plywood Association
	API	American Petroleum Institute
	ARI	Air Conditioning and Refrigeration Institute
	ASAHC	American Society of Architectural Hardware Consultants
	ASCE	American Society of Civil Engineers
	ASHRAE	American Society of Heating, Refrigeration and Air Conditioning
		Engineers
	ASME	American Society of Mechanical Engineers
	ASTM	American Society for testing and Materials
	ATI	Asphalt Tile Institute
	AWI	Architectural Woodwork Institute
	AWPA	American Wood Preservers Association
A١	/e.	
ces	S	

Greenville Ave. Beach Access Atlantic Beach, NC Project #24001

01090-1

	· · · · · · · · · · · · · · · · · · ·			
AWPI	American Wood Preservers Institute			
AWS	American Welding Society			
BHMA	Builders Hardware Manufacturers Association			
BIA	Brick Institute of America			
BRI	Building Research Institute			
CABRA	Copper and Brass Research Association			
CAGI	Compressed Air and Gas Institute			
CE	Corps of Engineers (Army)			
CRSI	Concrete Reinforcing Steel Institute			
CSI	Construction Specifications Institute			
CTI	Cooling Tower Institute			
DFPA	Douglas Fir Plywood Association			
ETL	Electrical Testing Laboratories			
FGMA	Flat Glass Marketing Association			
FHA	Federal Housing Administration			
FM	Factory Mutual Engineering Division, Association of Factory			
1 101	Mutual Fire Insurance Companies			
FPL				
FFL	Forest Products Laboratory			
	Federal Specifications			
FTI	Facing Tile Institute			
GA	Gypsum Association			
GTA	Glass Tempering Association			
HPMA	Hardwood Plywood Manufacturers Association			
IBRM	Institute of Boiler and Radiator Manufacturers			
IEEE	Institute of Electrical and Electronics Engineering			
IES	Illuminating Engineering Society			
JAN	Joint Army-Navy Specifications			
MAC	Masonry Advisory Council			
MIA	Marble Institute of America			
MLMA	Metal Lath Manufacturers Association			
MS	Military Specifications			
MSS	Manufacturers Standardization Society of the Valves and Fitting			
	Industries			
MSTD	Military Standard			
NAAMM	National Association of Architectural Metal Manufacturers			
NAFM	National Association of Fan Manufacturers			
NAPF	National Association of Plastic Manufacturers			
NBHA	National Builders Hardware Association			
NBS	National Bureau of Standards			
NCMA	National Concrete Masonry Association			
NEC	National Electric Code (NFPA Pamphlet No. 70)			
NEMA	National Electric Manufacturers Association			
NEMI	National Elevator Manufacturing Industry, Inc.			
NFC	National Fire Code			
NFPA	National Fire Protection Association			
NFPA	National Forest Products Association			
NHLA	National Hardwood Lumber Association			
NHPMA	Northern Hardwood and Pine Manufacturers Association			
NPA	National Particleboard Association			
NPCA	National Paint and Coatings Association			
NRMCA	National Ready Mixed Concrete Association			
NSC	National Safety Council			
	National Salety Council			
Greenville Ave.				
Beach Access				
Atlantic Beach, NC				
Project #24001	01090-2			

NSF NTMA NWMA OSHA PCA PCI PEI PS RIS RIS RTI SAE SBI SCMA	National Sanitation Foundation The National Terrazzo and Mosaic Association, Inc. National Woodwork Manufacturers Association Occupational Safety and Health Administration Portland Cement Association Prestressed Concrete Institute Porcelain Enamel Institute, Inc. Product Standard, U.S. Department of Commerce Redwood Inspection Service Resilient Tile Institute Society of Automotive Engineers Steel Boiler Institute Southern Cypress Manufacturers Association
SDI SDI	Steel Deck Institute Steel Door Institute
SJI	Steel Joint Institute
SMACCNA	
SWACCINA	Sheet Metal and Air Conditioning Contractors National Association
SMFMA	Sprayed Mineral Fiber Manufacturers Association, Inc.
SPIB	Southern Pine Inspection Bureau
SSPC	Steel Structures Painting Council
SWFPA	Structural Wood Fiber Products Association
TCA	Tile Council of America
TEMA	Tubular Exchange Manufacturing Association
TIMA	Thermal Insulation Manufacturers Association
TPI	Truss Plate Institute
UL	Underwriter's Laboratories, Inc.
UPC	Uniform Plumbing Code
WRI	Wire Reinforcement Institute
WWPA	Western Wood Products Association

1.2 ABBREVIATIONS OF WORDS AND PHRASES

A. Abbreviations of words and phrases applicable to this Project; other than listed above for reference standards, shall be as shown on the Drawings.

1.3 SYMBOLS

A. Symbols representing construction materials and the equipment applicable to this Project shall be as shown on the Drawings.

PART 2 & 3 - NOT USED.

END OF SECTION 01090

SECTION 01200 - PROJECT MEETINGS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work included: To enable orderly review during progress of the Work, and to provide for systematic discussion of problems, the Architect may conduct project meetings throughout the construction period.

- B. Related work:
 - 1. The Contractor's relations with his subcontractors and materials suppliers, and discussions relative thereto, are the Contractor's responsibility and normally are not part of project meetings content.

1.2 SUBMITTALS

A. Agenda items: To the maximum extent practicable, advise the Architect at least 24 hours in advance of project meetings regarding items to be included in or added to the agenda.

B. Minutes:

- 1. The Architect will compile minutes of each project meeting, and will furnish one copy to each Contractor and required copies to the Owner.
- 2. Recipients of copies may make and distribute such other copies as they wish.

1.3 QUALITY ASSURANCE

A. For those persons designated by the Contractor to attend and participate in project meetings, provide required authority to commit the Contractor to solutions agreed upon in the project meetings.

PART 2 - PRODUCTS

(No products are required in this Section)

PART 3 - EXECUTION

3.1 GENERAL

- A. Except as noted below for Preconstruction Meeting, project meetings may be held monthly,
- B. Coordinate as necessary to establish mutually acceptable schedule for meetings.

3.2 PRECONSTRUCTION MEETING

- A. Preconstruction Meeting will be scheduled to be held within 15 working days of the written Notice to Proceed.
 - 1. Provide attendance by authorized representatives of the Contractors and major subcontractors.
 - 2. The Architect will advise other interested parties, including the Owner.
- B. Minimum agenda: Data will be distributed and discussed on at least the following items:
 - 1. Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, and Architect.
 - 2. Channels and procedures for communication.
 - 3. Construction schedule, including sequence of critical work.
 - 4. Contract Documents, including distribution of required copies of original Documents and revisions.
 - 5. Processing of Shop Drawings and revisions.
 - 6. Processing of Bulletins, field decisions, and Change Orders.
 - 7. Rules and regulations governing performance of the Work; and

8. Procedures for safety and first aid, security, quality control, housekeeping, and related matters.

3.3 PROJECT MEETINGS

- A. Attendance:
 - 1. To the maximum extent practical, assign the same person or persons to represent the Contractor at project meetings throughout progress of the Work.
 - 2. Subcontractors, materials suppliers, and others may be invited to attend those project meetings in which their aspect of the Work is involved.
 - 3. Representative from the owner.
- B. Minimum agenda:
 - 1. Review progress of the Work since last meeting, including status of submittals for approval.
 - 2. Identify problems which impede planned progress.
 - 3. Develop corrective measures and procedures to regain planned schedule.

Complete other current business.

END OF SECTION 01200

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions and other Division 1 specifications sections, apply to work of this section.

1.2 DESCRIPTION

A. Post Award Requirements

1. Draft of Construction Schedule: Within two weeks of Date of Commencement of the Work, Contractor shall complete draft of time-scaled CPM Construction

Schedule. (Bar chart is acceptable.)

2. Level of Detail: Except for procurement and General Conditions requirements, differentiate activities on schedule so that no single activity shown requires more than twenty-one (21) calendar days to complete.

B. Schedule of Values

1. Within seven (7) days after completion of CPM Construction Schedule and

Architect include cost will be identified on before first pay request, Contractor shall submit Schedule of Values (see Section 01370) for review by the allocating a dollar value for each activity on Construction Schedule. Dollar value for each activity will broken into labor, materials, and pro rata contribution to overhead and profit. Subcontract sums the Schedule of Values and broken down as described above.

C. Approval

1. Approval of Construction Schedule and Schedule of Values will be signified by the Architect and Contractor's joint signatures on one copy of each document. Thereafter, Project will be monitored with Construction Schedule, which Contractor shall use in planning, organizing, directing, coordinating, and executing the Work and which shall be the basis for evaluating the progress of the Work.

- D. Schedule Revisions
 - 1. General: Revisions to approved Construction Schedule must be approved in writing by Architect and Contractor.
 - 2. Contractor: Submit requests for revisions to schedule to Architect together with written rationale and description of logic for rescheduling work to maintain Specific Contractual Milestone Dates.
 - a. Proposed revisions acceptable to the Architect will be incorporated into next update of Construction Schedule by the Contractor.
 - 3. Owner: Changes initiated by Owner and implemented by Change Orders which have potential to affect critical dates will require Contractor to prepare revised schedule for the Architect's concurrence. The Architect's approved revisions will be incorporated into the Construction Schedule. Adjustments in scheduled completion dates, either for intermediate activities or for Contract as a whole, will be considered only to extent that there is not sufficient float to absorb the revisions accepted.
- E. Recovery Schedule
 - 1. General: Should updated Construction Schedule show Contractor to be fourteen (14) or more days behind schedule at any time during construction, the Architect may require Contractor to prepare Recovery Schedule, displayed in CPM format, which will display Contractor's plan for returning to schedule within subsequent pay period.

- 2. Schedule Preparation: Within seven (7) days after notice from the Architect, prepare and submit to the Architect a Recovery Schedule, incorporating best available information from Subcontractors and others which will permit return to Construction Schedule within subsequent pay period. Prepare Recovery Schedule to same level of detail as Construction Schedule.
- 3. Schedule Assessment: Seven (7) days prior to expiration of Recovery Schedule, confer with the Architect to assess effectiveness of Recovery Schedule. As a result of this conference, the Architect will direct Contractor as follows:
- 4. Behind Schedule: If the Architect determines Contractor is still behind schedule, the Architect will direct Contractor to prepare another Recovery Schedule for subsequent pay period.
- 5. On Schedule: If the Architect determines Contractor has successfully complied with provisions of Recovery Schedule, the Architect will direct Contractor to return to use of Construction Schedule.

PARTS 2 & 3 - NOT USED.

END OF SECTION 01310

SECTION 01340 - SUBMITTALS AND SUBSTITUTIONS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Make submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements.
- B. Related work:
 - 1. Documents affecting work of this Section include but are not necessarily limited to General Conditions Amendments to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. Individual requirements for submittals also may be deceived in pertinent Sections of these Specifications.

C. Work not included:

- 1. Unrequired submittals will not be reviewed by the Architect.
- 2. The Contractor may require his subcontractors to provide drawings, setting diagrams, and similar information to help coordinate the Work, but such data shall remain between the Contractor and his subcontractors and will not be reviewed by the Architect.

1.2 SUBMITTALS

- A. Make submittals of Shop Drawings, Samples, substitution requests, and other items in accordance with the provisions of this Section.
- B. Coordination of Submittals:
 - 1. Prior to each submittal, carefully review and coordinate all aspects of each item being submitted.
 - 2. Verify that each item and the submittal for it CONFORMS IN ALL RESPECTS to the specified requirements.
 - 3. By affixing his signature to each submittal, the Contractor certifies that THIS COORDINATION HAS BEEN PERFORMED.
 - 4. The Contractor shall stamp the shop drawings as "Approved" or "Approved as Noted" before submitting to Architect for review.

1.3 QUALITY ASSURANCE

- A. "Equals" and "Substitutions"
 - 1. The Contract is based on the standards of quality established in the Contract Documents. Requests for substitutions will be considered when submitted according to the procedures set forth below.
 - a. Particularly with regard to MAJOR materials, equipment or methods proposed for the Work as set forth in the Contract Documents, Contractor's request(s) for approvals of "equals" not specifically named in the Contract Documents MUST BE SUBMITTED IN WRITING with supporting documentation, and inn the hands of the Architect no less than fourteen (14) days, prior to bid date. Telephone requests for consideration of proposed "equals" will not be accepted.
 - b. On other items of Work, Contractor may request consideration of substitution, when submitted in writing with supporting documentation within fourteen (14) days following the Notice to Proceed.
- B. Where the phrase "or equal" or "equal as approved by Architect" occurs in the Contract Documents, do not assume that the Contractor's choice of materials, equipment, or methods will be approved as equal unless the item has been specifically approved for this Work by the Architect.
- C. Do not substitute materials, equipment, or methods unless such substitution has be specifically approved in writing for this Work by the Architect.

PART 2 - PRODUCTS

2.1 SHOP DRAWINGS

- A. Scale and Measurements: Make Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its methods of connection to the Work.
- B. Types of prints required:
 - 1. Submit Shop Drawings in the form of five blue line or black line prints of each sheet; Architect will retain one copy. (Electronic Copy preferred)
- C. Review comments of the Architect will be shown in red on prints and returned to the Contractor. The Contractor may make and distribute such copies as are required for his purposes.

2.2 MANUFACTURER'S LITERATURE

- A. Where contents of submitted literature from the manufacturers includes data not pertinent to the submittal, clearly show which portions of the contents are being submitted for review.
- B. Submit three copies of each which are required to be returned, plus one copy which will be retained by the Architect.

2.3 SAMPLES

- A. Provide Sample or Samples identical to the precise article proposed to be provided. Identify as described under "Identification of Submittals" below.
- B. Number of Samples required:
 - 1. Unless otherwise specified, submit one sample in the quantity which is required to be returned, plus on which will be retained by the Architect.
 - 2. By prearrangement in specific cases, a single Sample may be submitted for review and, when approved, be installed in the Work at a location agreed upon by the Architect.
 - 3. Except as noted in 2.3.B.2 above, no selections of color, texture or finish will be approved by the Architect until ALL substitutions have been approved by the Architect, and ALL necessary samples and color, texture, finish proposals have been submitted in their entirety by the Contractor, in order that a coordinated, total scheme may be developed by the Architect.

PART 3 - EXECUTION

- 3.1 IDENTIFICATION OF SUBMITTALS
 - A. Consecutively number all submittals.
 - 1. When material is resubmitted of any reason, transmit under a new letter of transmittal and with a new transmittal number.
 - 2. On resubmittals, cite the original submittal number for reference.
 - B. Accompany each submittal with a letter of transmittal showing all information required for identification and checking.
 - C. On at least the first page of each submittal, and elsewhere as required for positive identification, show the submittal number in which the item was included.
 - D. Maintain an accurate submittal log for the duration of the Work, showing current status of all submittals at all times. Make the submittal log available to the Architect for his review upon request.

3.2 GROUPING OF SUBMITTALS

- A. Unless otherwise specified, make submittals in groups containing all associated items to assure that information is available for checking each item when it is received.
 - 1. Partial submittals may be rejected as not complying with the provisions of the Contract.

3.3 TIMING OF SUBMITTALS

A. Make submittals far enough in advance of schedule dated for installation to provide time required for reviews, for securing necessary approvals, for possible revisions and re-submittals, and for placing orders and securing delivery. All submittals shall be submitted within thirty (30) days of the notice to proceed.

3.4 ARCHITECT'S REVIEW

A. Review by the Architect does not relieve the Contractor from responsibility for errors which may exist in the submitted data.

B. Revisions:

- 1. Make revisions required by Architect.
- 2. If the Contractor considers any required revision to be a change, he shall so notify the Architect as provided in the General Conditions.
- 3. Make only those revisions directed or approved by the Architect.
- C. Reimbursement of Architect's Costs
 - 1. In the event substitutions are proposed by the Architect after the Contract has been awarded, the Architect will record all time used by him and by his consultants in evaluation of each such proposed substitution.
 - 2. Whether or not the Architect approves a proposed substitution, the Contractor, promptly upon receipt of the Architect's billing, reimburse the Architect at the rate of two and one-half times the direct cost to the Architect and his consultants for all the time spent by them in evaluating the proposed substitution.

END OF SECTION 01340

SECTION 01370 - SCHEDULE OF VALUES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide a detailed breakdown of the agreed Contract sum showing values allocated to each of the various parts of the Work, as specified herein and in other provisions of the Contract Documents.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Amendments to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. Schedule of values may be described on the continuation sheet of AIA document G702 accompanying applications for payment.

1.2 SUBMITTALS

- A. Prior to first application for payment, submit a proposed schedule of values to the Architect. See Section 01310.
 - 1. Meet with the Architect and determine additional data, if any, required to be submitted.
 - a. Mobilization, Submittal Review, Material Delivery, Execution of the Work, and Punch listing shall be included in the schedule.
 - b. Labor and materials shall be separate items.
 - 2. Secure the Architect's review of the schedule of values prior to submitting first application for payment.

PART 2 & 3 - NOT USED.

END OF SECTION 01370

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide temporary facilities and controls needed for the Work including, but not necessarily limited to:
 - 1. Temporary utilities such as heat, water, electricity.
 - 2. Sanitary facilities;
 - 3. Enclosures such as tarpaulins, barricades, and canopies;
 - 4. Project sign.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Amendments to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. Except that equipment furnished by subcontractors shall comply with requirements of pertinent safety regulations, such equipment normally furnished by the individual trades in execution of their own portions of the Work are not part of this Section.
 - 3. Permanent installation and hookup of the various utility lines are described in other Sections.

1.2 PRODUCT HANDLING

A. Maintain temporary facilities and controls in proper and safe condition throughout progress of the Work.

1.3 LOCAL REGULATIONS

A. Comply with all local ordinances and owner regulations, including local and temporary facilities, parking and storage.

PART 2 - PRODUCTS

2.1 UTILITIES

- A. Water:
 - 1. Provide necessary temporary piping, upon completion, remove such temporary facilities.
 - 2. Provide temporary water as required.
- B. Electricity:
 - 1. Provide necessary temporary wiring and, upon completion of the Work, remove such temporary facility.
 - 2. Provide area distribution boxes so located that the individual trades may obtain power and lighting at points where needed for work, inspection, and safety
 - 3. Generator power to be by the Contractor.

2.2 SANITARY FACILITIES:

- A. Sanitary facilities:
 - 1. Provide temporary sanitary facilities in the quantity required for use by all personnel.
 - 2. Maintain in a sanitary condition at all times.

2.3 ENCLOSURES

- A. Provide and maintain for the duration of construction all scaffolds, tarpaulins, canopies, warning signs, steps, platforms, bridges, and other temporary construction necessary for proper completion of the Work in compliance with pertinent safety and other regulations.
 - 1. All apparatus, equipment, temporary and permanent construction shall meet all local and State labor laws and safety regulations applicable thereto.

2.4 PROJECT SIGN

- A. It shall be the responsibility of the General Contractor to have constructed, painted, mounted, etc. and installed a project sign, as shown on drawing by the Architect.
- B. Upon completion of the Work, demount the job sign and dispose of property.
- C. Except as otherwise specifically approved by the Architect, do not permit other signs or advertising on the job site.

PART 3 - EXECUTION

3.1 MAINTENANCE AND REMOVAL

- A. Maintain temporary facilities and controls as long as needed for safe and proper completion of the Work.
- B. Remove such temporary facilities and controls as rapidly as progress of the Work will permit, or as directed by the Architect.

3.2 TRAFFIC COORDINATION

A. Any construction related activities, such as receiving, loading, unloading, or other activities which may be an interruption to normal vehicular traffic flow on the campus shall be coordinated in advance by the Contractor with the public authority having jurisdiction.

END OF SECTION 01500

SECTION 01710 - CLEANING

PART 1 - GENERAL

1.1 DESCRIPTION

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

1.2 QUALITY ASSURANCE

- A. Conduct daily inspection to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this Section. Comply with pertinent requirements of governmental agencies having jurisdiction.

PART 2 - PRODUCTS

2.1 COMPATIBILITY

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

PART 3 - EXECUTION

3.1 PROGRESS CLEANING

- A. General:
 - 1. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage, and providing required protection of materials.
 - 2. Do not allow accumulation of scrap, debris, waste material, and other items not required for construction of this Work.
 - 3. At least once each week, and more often if necessary, completely remove all scrap, debris, and waste material from the job site.
 - 4. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.
 - 5. The site shall be cleaned daily of all debris and waste material resulting from the construction operations.

END OF SECTION 01710