

CONTRACT DOCUMENTS

FOR

EMERALD SUBDIVISION POND OUTLET STRUCTURE REPLACEMENT / IMPROVEMENT EMERALD ISLE, NORTH CAROLINA



November 18, 2022

Issued by:
TOWN OF EMERALD ISLE

Plans and Specifications Prepared by:
Moffatt & Nichol



4700 Falls of Neuse Road, Suite 300
Raleigh, NC 27609

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NOTICE TO BIDDERS

Sealed bids will be received by The Town of Emerald Isle at the Town of Emerald Isle Office (in person) at 7509 Emerald Drive, Emerald Isle, NC 28594 or (via mail) at 7500 Emerald Drive, Emerald Isle, NC 28594, **until 2:00 pm**, Eastern Standard Time (EST) on **December 9, 2022**, and immediately thereafter publicly opened and read for the furnishing of labor, materials and equipment entering into the construction of:

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

The Project consists of 18” nominal dimension HDPE pipe to be installed by open cut. Other site work includes removal of existing outlet structure and an abandon-in-place existing stormwater pipe. Incidental grading, excavations, temporary shoring, erosion control and pavement work may also be included.

Sealed bids may also be mailed to Matt Zapp, Town Manager, Emerald Isle Office, 7500 Emerald Drive, Emerald Isle, NC 28594. It is the Bidder’s responsibility however, to ensure that its’ bid is received at the bid opening location.

Bids will be received for single prime only. All bids shall be lump sum base bids based upon the scope of work defined in the Contract Documents, Plans and Specifications.

A Pre-Bid Meeting will be held for all interested bidders at **10:00 AM** on **November 29, 2022** at the Town of Emerald Isle Administration Office at 7509 Emerald Drive, Emerald Isle, NC 28594. The meeting will address project specific questions, issues, and bidding procedures. Attendance by prospective bidders is not mandatory.

Concerns and or questions should be related in writing to Matt Zapp, Town Manager at MZapp@EmeraldIsle-NC.org no later than **2:00 pm** on **December 1, 2022**.

Complete plans and specifications in digital (pdf) format for this project can be obtained from:

Matt Zapp, Town Manager
MZapp@EmeraldIsle-NC.org

Each bid shall be accompanied by a cash deposit, or a certified check drawn on a bank or trust company authorized to do business in North Carolina, payable to The Town of Emerald Isle, in an amount equal to five percent (5%) of the total amount of the bid, as a guarantee that a contract will be entered into. In lieu of cash or a certified check, the Bidder may submit a bid bond in the form prescribed in N.C. Gen. Stat. § 143-129.

The Successful Bidder shall be required to furnish a performance bond and a payment bond for one hundred percent (100%) of the contract amount.

No bid may be withdrawn after the scheduled closing time for the receipt of bids for a period of 30 days.

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

All bidders must meet the licensing requirements under Chapter 87 of the N.C. General Statutes. Small Business Entities, Women Owned Businesses, Minority Owned Businesses, Veteran and Service-disabled Veteran Owned Businesses are encouraged to submit bids.

The Owner reserves the right to reject any or all bids and to waive informalities, as it may deem to be in its best interest.

INSTRUCTIONS TO BIDDERS
AND
GENERAL CONDITIONS OF THE CONTRACT

INSTRUCTIONS TO BIDDERS

For a bid to be considered it must be in accordance with the following instructions:

1. EXAMINATION OF CONDITIONS

It is understood and mutually agreed that by submitting a bid the Bidder acknowledges that:

- 1) the Bidder has carefully examined and understands all Contract Documents pertaining to the Work, the location, accessibility and general character of the site of the Work and all existing buildings and structures within and adjacent to the site;
- 2) the Bidder has satisfied itself as to the nature of the Work, the condition of existing buildings and structures, the conformation of the ground, the character, quality and quantity of the material to be encountered, the character of the equipment, machinery, plant and any other facilities needed preliminary to and during prosecution of the Work, the general and local conditions, the construction hazards, and all other matters, including, but not limited to, the labor situation which can in any way affect the work under the Contract, and including all safety measures required by the Occupational Safety and Health Act of 1970 and all rules and regulations issued pursuant thereto;
- 3) the Bidder has satisfied itself as to the feasibility and meaning of the plans, drawings, specifications and other Contract Documents for the construction of the Work and that he accepts all the terms, conditions and stipulations contained therein;
- 4) the Bidder is prepared to work in cooperation with other contractors performing work on the site;
- 5) Additional surveys and investigations the Bidder deems necessary to determine his Bid price for the performance of the Work is at the Bidder's own expense and at the convenience of the Owner;
- 6) the Bidder has investigated all required fees, permits, and regulatory requirements of authorities having jurisdiction and has properly included in the submitted bid the cost of such fees, permits, and requirements not otherwise indicated as provided by Owner; and
- 7) the Bidder has incorporated into the Bid adequate sums for work performed by installers who qualifications meet those indicated in the Instructions to Bidders and General Conditions of this Contract.

2. DISTRIBUTION OF CONTRACT DOCUMENTS

Bidders shall obtain complete Contract Documents in digital (pdf) format via email from the Owner as indicated in the Notice to Bidders.

Bidders shall use complete Contract Documents in preparing bids. The Owner assumes no responsibility for errors or misinterpretations resulting from the use of incomplete Contract Documents.

The Contract Documents will be available for the sole purpose of obtaining bids on the work. No license or grant of use is conferred by distribution of the Contract Documents.

3. PRE-BID MEETING

The Owner will conduct a Pre-Bid Meeting for all prospective bidders on **November 29, 2022** at **10:00 AM** at the Emerald Isle Administration Office at 7509 Emerald Drive, Emerald Isle, NC 28594.

The purpose of this meeting is to review project requirements and to respond to questions from prospective bidders and their subcontractors or material suppliers related to the intent of Contract Documents. Attendance by prospective bidders is not mandatory.

4. MODIFICATIONS OR INTERPRETATIONS OF CONTRACT DOCUMENTS

The Bidder shall carefully review the Contract Documents, shall examine the site and local conditions, and shall notify the Owner of errors, inconsistencies, or ambiguities discovered and request clarification or interpretation.

If discrepancies between the various parts of the Contract Documents are discovered, the means to obtain clarification shall be as follows:

- a. Discrepancies discovered during the Bid Phase: Submit a written request for clarification to the Owner at least seven (7) days before the Bid Date. Changes will be addressed through an Addendum.
- b. Discrepancies discovered during the time after the Bid Date, but before the Contract has been executed: Changes will be made through Modification of the Contract in accordance to mutually agreeable conditions set forth between the Contractor and the Owner.
- c. Discrepancies discovered after the Contract has been executed: Changes will be made in accordance with Article 9 of the General Conditions of the Contract.

Modifications and interpretations of the Contract Documents made in any other manner shall not be binding, and Bidders shall not rely upon them.

5. SUBSTITUTIONS

In accordance with the provisions of N.C. Gen. Stat. § 133-3, material, product, or equipment substitutions proposed by the Bidders to those specified herein can only be considered during the bidding phase until ten (10) days prior to the receipt of bids when submitted to the Owner with sufficient data to confirm material, product, or equipment equality. Proposed substitutions submitted after this time will be considered only as potential change order. Submittals for proposed substitutions shall include the following information:

- a. Name, address, and telephone number of manufacturer and supplier as appropriate.
- b. Trade name, model or catalog designation.

- c. Product data including performance and test data, reference standards, and technical descriptions of material, product, or equipment. Include color samples and samples of available finishes as appropriate.
- d. Detailed comparison with specified products including performance capabilities, warranties, and test results.
- e. Other pertinent data including data requested by the Owner to confirm product equality.

If a proposed material, product, or equipment substitution is deemed equal by the Owner to those specified, all bidders of record will be notified by Addendum.

6. ADDENDA

Addenda will be transmitted electronically by email to Bidders known by the Owner to have received complete Contract Documents.

Addenda will be issued no later than four (4) days prior to the date for receipt of Bids, except an Addendum withdrawing the request for Bids or one which includes postponement of the date of receipt for Bids.

Any addenda to specifications issued during the time of bidding are to be considered covered in the Bid and in closing a contract they will become a part thereof. It shall be the Bidder's responsibility to ascertain prior to bid opening the addenda issued and to see that its Bid includes any changes thereby required.

All addenda shall be acknowledged by the Bidder on the Bid Form.

The Owner may elect to waive the requirement for acknowledging receipt of Addenda as follows:

- 1) Information received as part of the Bid indicates that the Bid, as submitted, reflects modifications of the Contract Documents included in an unacknowledged Addendum.
- 2) Modifications to the Contract Documents in unacknowledged Addendum do not, in the opinion of the Owner, affect the Contract Sum or Contract Time.

7. PREPARATION OF BIDS

Bids shall be submitted on the provided Bid Form. Printable electronic Bid Forms and related documents are available from the Owner.

All blanks on the Bid Form shall be typed or legibly executed in blue or black ink. Photocopied or faxed bids will not be considered.

Edits to entries made on the Bid Form must be initialed by the signer of the Bid.

Each copy of the Bid shall state the legal name and legal status of the Bidder. As part of the documentation submitted with the Bid, the Bidder shall provide evidence of its legal authority to

perform the Work. Each copy of the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract.

The Bidder shall fill in the Bid Form as follows:

- a. If the documents are executed by a sole owner, that fact shall be evidenced by the word "Owner" appearing after the name of the person executing them.
- b. If the documents are executed by a partnership, that fact shall be evidenced by the word "Co-Partner" appearing after the name of the partner executing them.
- c. If the documents are executed on the part of a corporation, they shall be executed by either the President or the Vice President and attested by the Secretary or Assistant Secretary and the title of the office of such persons shall appear after their signatures. The seal of the corporation shall be impressed on each signature page of the documents. A bid submitted by an agent shall have a current power of attorney attached, certifying the agent's authority to bind the Bidder.
- d. If the Bid is made by a joint venture, it shall be executed by each member of the joint venture in the above form for sole owner, partnership or corporation, whichever form is applicable.
- e. All signatures shall be properly witnessed.
- f. If the contractor's license of a Bidder is held by a person other than an owner, partner or officer of a firm, then the licensee shall also sign and be a party to the bid. The title "Licensee" shall appear under his/her signature.

A Bidder shall incur all costs associated with the preparation of its Bid.

Bids shall include sales tax and all other applicable taxes and fees. Contractors shall show separately with each monthly payment application the sales and use taxes paid by them and their subcontractors in the form indicated. Reimbursement of sales and use taxes, if any, shall be applied for by the Owner for the sole benefit of the Owner.

The Bid shall include overhead and profit and shall be the full compensation for the Contractor's cost involved in the Work.

8. BASIS OF THE BID

Bids shall be lump sum based upon the scope of work defined in the Contract Documents, Plans and Specifications.

The bid amounts provided on the Bid Form shall be shown in both words and figures. In case of discrepancy, the amount in words shall govern.

9. BID SECURITY

Each Bid shall be accompanied by a cash deposit, or a certified check drawn on a bank or trust company authorized to do business in North Carolina, payable to The Town of Emerald Isle, in

an amount equal to five percent (5%) of the total amount of the Bid or a bid bond in an amount equal to not less than five percent (5%) of the Bid. The cash deposit will be retained by the Owner as liquidated damages in event of failure of the Successful Bidder to execute the Contract within ten (10) days after the award or to give satisfactory surety as required by law (N.C. Gen. Stat. § 143-129).

Bid bond shall be conditioned that the Surety will, upon demand, forthwith make payment to the Owner upon said bond if the Bidder fails to execute the Contract. The Owner may retain bid securities of any bidder who may have a reasonable chance of award of contract for the full duration of time stated in the Notice to Bidders. Other bid securities may be released sooner, at the discretion of the Owner. All bid securities (cash or certified checks) shall be returned to the Bidders promptly after contract award and no later than seven (7) days after expiration of the holding period stated in the Notice to Bidders. A bid bond form is included in these specifications.

10. SUBMISSION OF BIDS

A Bidder shall submit its Bid as indicated in the Notice to Bidders utilizing a two-envelope system.

Envelope One will contain the bid security only and should include “Bid Security” on the face of the envelope. Envelope Two will include the Bid Form and any other documents required to be submitted with the bid. Both envelopes shall be sealed separately.

Envelope One and Envelope Two shall be placed in a sealed envelope with the notation “SEALED BID ENCLOSED” and addressed to The Town of Emerald Isle. The project name, and the Bidder’s name and address should also be identified on the face of the envelope.

Bids shall be submitted by the date and time and at the place specified in the Notice to Bidders. Bids received after the date and time specified will not be accepted. The Bidder assumes full responsibility for timely delivery.

11. MODIFICATION OR WITHDRAWAL OF BIDS

A Bidder may replace a previously submitted Bid with a new Bid only if the Bid is delivered in writing to the party designated to receive bids prior to the date and time for opening bids.

The Owner will consider modifications to a Bid written on the sealed bid envelope by the authorized persons when such modifications comply with the following: the modification is indicated by a percent or stated amount to be added or deducted from the Bid; the amount of the Bid itself is not made known by the modification; a signature of the authorized person, along with the time and date of the modification, accompanies the modification. Completion of an unsealed Bid Form, awaiting final figures from the Bidder, does not require power of attorney due to the evidenced authorization of the Bidder implied by the circumstance of the completion and delivery of the Bid.

A Bidder may withdraw its previously submitted Bid prior to the date and time for opening bids. Withdrawn bids may be resubmitted up to the date time for opening bids. Bid security shall be in an amount equal to five percent (5%) of the Bid as resubmitted.

Such modifications to or withdrawal of a bid may only be made by persons authorized to act on behalf of the Bidder. Authorized persons are those so identified in the Bidder's corporate bylaws, specifically empowered by the Bidder's charter or similar legally binding document acceptable to the Owner, or by a Power of Attorney, signed and dated, describing the scope and limitations of the Power of Attorney. Documentation of such shall be made available to the Owner at the time of seeking modifications or withdrawal of the Bid.

A Bidder has 72 hours after the bid opening to submit a written request to withdraw its Bid without penalty only if the Bid was based on a substantial error or omission that was clerical (not a judgement error) and the Bid was submitted in good faith.

Upon receipt of the Bidder's written request, the Owner shall promptly hold a hearing on the Bidder's request. The Owner shall issue a written decision within five (5) days of the hearing.

The Bidder may appeal a denial to withdraw its Bid to Superior Court within twenty (20) days of receiving the Owner's decision.

A Bidder who withdraws may not bid on the Project if it is rebid.

A Bidder who withdraws may not provide materials, equipment or labor to a contractor or subcontractor performing on the Contract from which the Bidder withdrew without prior written permission of the Owner.

12. OPENING OF BIDS

Bids shall be publicly opened and read aloud at the date and time specified in the Notice to Bidders.

Once any bid is opened, there shall not be any withdrawal of bids by any bidder and no bids may be returned by the Owner to any bidder.

Should the Successful Bidder default and fail to execute a contract, the Contract maybe awarded to the next lowest responsive and responsible bidder.

13. REJECTION OF BIDS

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

Reasons for rejection may include, but shall not be limited to, the following: failure to submit the Bid on the provided Bid Form, failure to bid requested alternates or unit prices, failure to complete all blanks on the Bid Form, inclusion by the Bidder of any alternates, conditions,

limitations or provisions not called for on the Bid Form, inclusion of unit prices determined unacceptable to the Owner, and failure to comply with any instructions stated herein.

The Owner reserves the right to reject a bid based on the Owner's evaluation of qualification information submitted following opening of bids. The Owner's evaluation of the Bidder's qualifications will include: state of licensure and record of compliance with licensing requirements, record of quality of completed work, record of project completion and ability to complete, record of financial management including financial resources available to complete Project and record of timely payment of obligations, record of project site management including compliance with requirements of authorities having jurisdiction, record of and number of current claims and disputes and the status of their resolution, and qualifications of Bidder's proposed Project staff and proposed subcontractors.

14. AWARD

The award of the Contract will be made to the lowest responsive and responsible bidder. The Owner may award on the basis of the base bid and any alternates the Owner chooses.

Before awarding a contract, the Owner may require the apparent low bidder to qualify himself to be a responsible bidder by furnishing any or all of the following data:

- a. The latest financial statement showing assets and liabilities of the company or other information satisfactory to the Owner.
- b. A listing of completed projects of similar size.
- c. Permanent name and address of place of business.
- d. The number of regular employees of the organization and length of time the organization has been in business under present name.
- e. The name and home office address of the surety proposed and the name and address of the responsible local claim agent.
- f. The names of members of the firms who hold appropriate trade licenses, together with license numbers.

Failure or refusal to furnish any of the above information, if requested, shall constitute a basis for disqualification of any bidder.

15. PERFORMANCE BOND AND PAYMENT BOND

The Successful Bidder shall furnish a performance bond and a payment bond executed by a surety company authorized to do business in North Carolina in an amount equal to one hundred percent (100%) of the contract amount. See Article 4, General Conditions.

The bonds shall be written on the provided forms.

The Bidder shall deliver the required bonds to the Owner no later than ten (10) days after the date of Notice of Award and no later than the date of execution of the Contract, whichever

occurs first. The Owner may deem the failure of the Bidder to deliver required bonds within the period of time allowed a default.

The bonds shall be executed and be in force on the date of the execution of the Contract.

16. PAYMENTS

Payments to the Successful Bidder (Contractor) will be made on the basis of monthly estimates. See Article 11, General Conditions.

17. EXECUTION OF THE CONTRACT

Subsequent to the Notice of Award, and within ten (10) days after the prescribed Agreement Between Owner and Contractor for Construction is presented to the Successful Bidder for signature, the Successful Bidder shall execute and deliver the Agreement to the Owner, in such number of counterparts as the Owner may require.

The Owner may deem as a default the failure of the Successful Bidder to execute the Agreement and to supply the required bonds when the Agreement is presented for signature within the period of time allowed.

Unless otherwise indicated in the Contract Documents or the executed Agreement, the date of commencement of the Work shall be indicated on the Notice to Proceed.

In the event of default, the Owner may declare the amount of the bid security forfeited and elect to either award the Contract to the next responsible bidder or re-advertise for bids.

18. PRE-CONSTRUCTION MEETING

A pre-construction meeting will be held after award of the Contract but prior to starting work at the site. The meeting date, time and location will be agreeable to the Owner and Contractor.

GENERAL CONDITIONS OF THE CONTRACT

The use or reproduction of this document or any part thereof is authorized for and limited to use on projects for Town of Emerald Isle, NC, and is distributed by, through and at the discretion of the Town of Emerald Isle, North Carolina, for that distinct and sole purpose.

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ARTICLE 1 – DEFINED TERMS

1.01 Defined Terms

- a. *Agreement* – Written instrument which is evidence of agreement between Owner and Contractor for the Work.
- b. *Application for Payment* – Form to be used by Contractor during course of the Work requesting progress or final payments.
- c. *Approval* – Written acknowledgement that materials, equipment or methods of construction are acceptable for use in the Work.
- d. *Bid* – The offer of a Bidder submitted on the Bid Form setting forth prices for the Work to be performed.
- e. *Bidder* – The individual or entity who submits a Bid to Owner.
- f. *Change Order* – A written order to the Contractor subsequent to the signing of the Agreement authorizing a change in the Agreement. The Change Order shall be signed by the Contractor and approved by the Owner, in that order (Article 9).
- g. *Contract Documents* – Those items designated in the Agreement.
- h. *Contract Times* – The number of days or the dates stated in the Agreement to achieve Substantial Completion and complete the Work so that it is ready for final payment.
- i. *Contractor* – The individual or entity with whom Owner has entered into the Agreement.
- j. *Day* – A calendar day of 24 hours.
- k. *Defective Work* – Work that is unsatisfactory, faulty or deficient in such a manner that it: (1) does not conform to the Contract Documents, (2) does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or (3) has been damaged prior to Final Payment of the Contractor.
- l. *Designer* – The firm with whom Owner contracted with for design of the Project.
- m. *Field Order* – A written order issued by Owner’s authorized representative which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

- n. *Liquidated Damages* - An amount reasonably estimated in advance to cover the losses incurred by the Owner by reason of failure of the Contractor to complete the Contract Times.
- o. *Notice of Award* – Written notice by Owner to Successful Bidder stating that upon timely compliance with the conditions provided herein, Owner will sign and deliver the Agreement.
- p. *Notice to Proceed* – Written notice by Owner to Contractor stating the date on which the Contract Times will commence to run and on which Contractor will start to perform the Work under the Contract Documents.
- q. *Owner* - Town of Emerald Isle, North Carolina as named in the Agreement.
- r. *Progress Schedule* – Schedule prepared and maintained by the Contractor describing the Contractor’s plan for completing the Work within the Contract Times.
- s. *Project* - Total construction work to be performed under the Contract Documents by the Contractor.
- t. *Subcontractor* – An individual or entity who has entered into a direct contract with the Contractor or any other Subcontractor for performance of part of the Work.
- u. *Substantial Completion* – The time at which the Work is sufficiently complete in accordance with the Contract Document and may be utilized for its’ intended purpose.
- v. *Successful Bidder* – The Bidder submitting a responsive Bid to whom Owner makes an award.
- w. *Surety* - The bonding company or corporate body which is bound with and for the Contractor, and which engages to be responsible for the Contractor and Contractor’s acceptable performance of the Work.
- x. *Work* – Materials, labor, and workmanship of the Contractor.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

- A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. Evidence of Insurance: Before any Work at the Site is started, Contractor and Owner shall each deliver to the other certificates of insurance (and other evidence of

insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 4.

2.02 Copies of Specifications and Drawings

A. The Owner will furnish to the Contractor with two (2) copies of the specifications and drawings. Additional copies will be furnished, upon request, at the cost of reproduction.

2.03 Notice to Proceed

A. The Contract Times will commence to run on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement.

2.04 Preliminary Schedules

A. Within ten (10) days of the effective date of the Agreement, the Contractor shall provide the Owner:

1. A preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
2. A preliminary Schedule of Submittals; and
3. A preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT AND USE

3.01 Intent

The Contract Documents are complementary, one to the other. That which is shown on the drawings or called for in the specifications shall be as binding as if it were both called for and shown. The intent of the drawings and specifications is to establish the scope of all labor, materials, transportation, equipment, and any and all other things necessary to provide a complete job.

3.02 Reference Standards

A. Wherever reference is given to codes, standard specifications or other data published by regulating agencies including, but not limited to, national electrical codes, North Carolina state building codes, federal specifications, ASTM specifications, various

institute specifications, etc., it shall be understood that such reference is to the latest edition including addenda published prior to the date of the Contract Documents.

- B. The wording of the specifications shall be interpreted in accordance with common usage of the language except that words having a commonly used technical or trade meaning shall be so interpreted in preference to other meanings.

3.03 Use of Documents

- A. All drawings and specifications are instruments of service and remain the property of The Town of Emerald Isle. The use of these instruments on work other than this Contract without permission of the Owner is prohibited. All copies of drawings and specifications other than contract copies shall be returned to the Owner upon request after completion of the Work.

3.04 Electronic Data

- A. The data furnished by Owner to Contractor, or by Contractor to Owner, that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

3.05 Execution of Documents

- A. The Contractor shall execute each copy of the Bid Form, Contract, Performance Bond and Payment Bond as follows:
 - 1. If the documents are executed by a sole owner, that fact shall be evidenced by the word "Owner" appearing after the name of the person executing them.
 - 2. If the documents are executed by a partnership, that fact shall be evidenced by the word "Co-Partner" appearing after the name of the partner executing them.

3. If the documents are executed on the part of a corporation, they shall be executed by either the president or the vice president and attested by the secretary or assistant secretary in either case, and the title of the office of such persons shall appear after their signatures. The seal of the corporation shall be impressed on each signature page of the documents.
4. If the documents are made by a joint venture, they shall be executed by each member of the joint venture in the above form for sole owner, partnership or corporation, whichever form is applicable to each particular member.
5. All signatures shall be properly witnessed.
6. If the Contractor's license is held by a person other than an owner, partner or officer of a firm, then the licensee shall also sign and be a party to the contract. The title "Licensee" shall appear under his/her signature.
7. The bonds shall be executed by an attorney-in-fact. There shall be attached to each copy of the bond a certified copy of power of attorney properly executed and dated.
8. Each copy of the bonds shall be countersigned by an authorized individual agent of the bonding company licensed to do business in North Carolina. The title "Licensed Resident Agent" shall appear after the signature.
9. The seal of the bonding company shall be impressed on each signature page of the bonds.
10. The Contractor's signature on the performance bond and the payment bond shall correspond with that on the Contract.

ARTICLE 4 – BONDS AND INSURANCE

4.01 Performance and Payment Bonds

- A. The Contractor shall furnish a performance bond and payment bond executed by a surety company authorized to do business in North Carolina. The bonds shall be in the full contract amount. Bonds shall be executed in the form bound with these specifications.
- B. All bonds shall be countersigned by an authorized agent of the bonding company who is licensed to do business in North Carolina.
- C. If at any time after the execution of the Agreement and the surety bonds hereto attached for its faithful performance, the Owner shall deem the Surety or Sureties upon such bonds to be unsatisfactory, or if, for any reason, such bonds cease to be adequate to cover the performance of the Work, the Contractor shall, at its expense, within five (5) days after the receipt of notice from the Owner so to do, furnish an additional bond or bonds in such form and amount, and with such Surety or Sureties as shall be satisfactory to the Owner. In such event no further payment to the Contractor shall be deemed to be due until such new or additional security for the faithful performance of the Work shall be furnished in manner and form satisfactory to the Owner.

4.02 Minimum Insurance Requirements

A. The Work under this Contract shall not commence until the Contractor has obtained all required insurance and verifying certificates of insurance have been approved in writing by the Owner. These certificates shall contain a provision that coverages afforded under the policies will not be cancelled, reduced in amount or coverages eliminated until at least thirty (30) days after mailing written notice, by certified mail, return receipt requested, to the insured and the Owner of such alteration or cancellation.

1. Worker’s Compensation and Employer's Liability

The Contractor shall provide and maintain, during the life of the Contract, workmen's compensation insurance, as required by law, as well as employer's liability coverage for not less than the following amounts or greater:

- | | |
|---|-------------|
| a. State: | Statutory |
| b. Applicable Federal (e.g., Longshoreman’s): | Statutory |
| c. Employer’s Liability: | \$1,000,000 |

2. General Liability and Property Damage

The Contractor shall provide and maintain, during the life of the Contract, comprehensive general liability insurance, including coverage for premises operations, independent contractors, completed operations, products and contractual exposures, as shall protect such contractors from claims arising out of any bodily injury, including accidental death, as well as from claims for property damages which may arise from operations under this Contract, whether such operations be by the Contractor or by any Subcontractor, or by anyone directly or indirectly employed by either of them and the minimum limits of such insurance shall be as follows:

- | | |
|---|-------------|
| a. General Aggregate | \$2,000,000 |
| b. Products - Completed Operations Aggregate | \$2,000,000 |
| c. Personal and Advertising Injury | \$1,000,000 |
| d. Each Occurrence (Bodily Injury and Property Damage) | \$1,000,000 |
| e. Property Damage liability insurance will provide
Explosion, Collapse, and Under-ground coverages
where applicable. | |
| f. Excess or Umbrella Liability | |
| ▪ General Aggregate | \$2,000,000 |
| ▪ Each Occurrence | \$2,000,000 |

3. Automobile Liability:

- | | |
|-----------------------------|-------------|
| a. Combined Single Limit of | \$1,000,000 |
|-----------------------------|-------------|

4. The Contractual Liability coverage required shall provide coverage for not less than the following amounts:
 - a. Bodily Injury:

Each person	\$1,000,000
Each Accident	\$1,000,000
 - b. Property Damage:

Each Accident	\$1,000,000
Annual Aggregate	\$1,000,000
5. Name the “Town of Emerald Isle” as additional insured on the policy. The Certificate Holder shall be listed as: Town of Emerald Isle, 7500 Emerald Drive, Emerald Isle, NC 28594.
6. Be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner and Contractor, with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued.
7. All policies of insurance (and the certificates or other evidence thereof) required to be maintained in accordance with Paragraph 4.02 will contain a provision or endorsement that the coverage afforded will not be cancelled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other loss payee to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 4.04.

4.03 Property Insurance

- A. Contractor shall purchase and maintain property insurance upon the Work at the site in the amount of full replacement cost thereof (subject to such deductible amounts as may be provided in these Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 1. Include the interests of Owner, Contractor, Subcontractors, and any other persons or entities deemed to have an insurable interest and shall be listed as an insured or additional insured;
 2. Be written on a Builder’s Risk “all-risk” or open peril or special causes of loss policy form that shall at least include insurance for physical loss and damage to the Work; temporary buildings, false work and work in transit and shall insure against least the following perils: fire, lightning, extended coverage , theft, vandalism and malicious mischief, earthquake, collapse, hurricanes, debris removal, demolitions occasioned by enforcements of Laws and Regulations, water damage, and such perils as may be specifically required by the Supplementary General Conditions;

3. Include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
4. Cover materials and equipment in transit for incorporation in the Work or stored at the site or at another location that was agreed to in writing by Owner prior to being incorporated into the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Owner; and
5. Be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner and Contractor with thirty days written notice to each other additional insured to whom certificate of insurance has been issued. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other loss payee to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 4.04.

4.04 Waiver of Rights

- A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 4.03 will protect Owner, Contractor, Subcontractors, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them as loss payees in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them as loss payees under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for:
 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 11.04, after Substantial Completion pursuant to Paragraph 11.03, or after final payment pursuant to Paragraph 11.05.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 4.04.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them.

4.05 Receipt and Application of Insurance Proceeds

- A. Any insured loss under the policies of insurance required by Paragraph 4.03 will be adjusted with Owner and made payable to Owner as fiduciary for the loss payees, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 4.05.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.
- B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

ARTICLE 5 – CONTRACTOR'S RESPONSIBILITIES

5.01 Supervision and Superintendence

- A. Throughout the progress of the Work, the Contractor shall keep at the job site, a competent superintendent or supervisory staff satisfactory to the Owner. The Superintendent shall not be changed without the consent of the Owner unless said Superintendent ceases to be employed by the Contractor or ceases to be competent. The Superintendent shall have authority to act on behalf of the Contractor, and instructions, directions or notices given to him shall be as binding as if given to the Contractor. Directions, instructions, and notices shall be confirmed in writing.

- B. The Contractor shall examine and study the drawings and specifications and fully understand the project design and shall provide constant and efficient supervision to the Work. Should Contractor discover any discrepancies of any sort in the drawings or specifications, Contractor shall report them to the Owner without delay. Contractor will not be held responsible for discrepancies in the drawings and/or specifications but shall be held responsible to report them should they become known to Contractor.

5.02 Working Drawings and Specifications at the Job Site

- A. The Contractor shall maintain, in readable condition at the job office, one complete set of working drawings and specifications for the Work including all shop drawings. Such drawings and specifications shall be available for use by the Owner or its authorized representative.
- B. The Contractor shall maintain at the job office, a day-to-day record of work-in-place that is at variance with the Contract Documents. Such variations shall be fully noted on project drawings by the Contractor and submitted to the Owner upon project completion and no later than 30 days after acceptance of the Project.

5.03 Materials, Equipment, and Employees

- A. The Contractor shall, unless otherwise specified, supply and pay for all labor, transportation, materials, tools, apparatus, lights, power, heat, sanitary facilities, water, scaffolding and incidentals necessary for the completion of the 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 therefrom, all in accordance with the Contract Documents.
- B. 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.
- C. Upon notice, Contractor shall furnish evidence as to quality of materials.
- D. 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. Request for substitution of materials, items, or equipment shall be submitted to the Owner for approval or disapproval; such approval or disapproval shall be made by the Owner prior to the opening of bids.
- E. The Contractor shall obtain written approval from the Owner for the use of products, materials, equipment, assemblies or installation methods claimed as equal to those specified. Such approvals must be obtained as soon after contract award as possible and before any materials are ordered. Applications for approvals shall be made by the Contractor and not by Subcontractors or material suppliers within thirty (30) days following award of contract. When the submittal schedule provided under Article 5 is approved, no further substitutions will be permitted except in unusual or extenuating circumstances. If no list is submitted, the Contractor shall supply materials specified.
 - F. The Owner is the judge of equality for proposed substitution of products, materials or equipment.
 - G. 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 grounds.

5.04 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established by Contractor and Owner.
- B. Progress schedule may be adjusted as provided below:
 - 1. Contractor shall submit to Owner for acceptance proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 8. Adjustments in Contract Times may only be made by a Change Order.
- C. It shall be the responsibility of the Contractor to cooperate with and obtain from subcontractors on the job, their respective work activities and integrate these activities into the Schedule. A “work activity,” for scheduling purposes, shall be any component or contractual requirement of the Project requiring at least one (1) day, but not more than fourteen (14) days, to complete or fulfill. The project construction schedule shall graphically show all salient features of the Work required to construct the Project from start to finish and within the allotted time established in the Contract. The time (in days) between the Contractor’s early completion and contractual completion dates is part of the Project total float time; and shall be used as such,

unless amended by Change Order. The Contractor shall submit the proposed construction schedule to the Owner for comments.

- D. The approved Progress Schedule shall be distributed to all subcontractors and displayed at the job site by the Contractor.
- E. The Contractor shall maintain the Schedule, making monthly adjustments, updates, corrections, etc. that are necessary to finish the Project within the Contract Time, keeping all subcontractors and the Owner fully informed. Current progress shall be submitted by the Contractor to the Owner, along with monthly request for payment. If any activities of the Work of several subcontractors are behind schedule, the Contractor must indicate in writing, what measures will be taken to bring each such activity back on schedule and to ensure that the Contract Time is not exceeded.
- F. A plan of action and recovery schedule shall be developed and submitted to the Owner by the Contractor, when (1) the Contractor's monthly report indicates delays, that are in the opinion of the Owner, of sufficient magnitude that the Contractor's ability to complete the Work by the scheduled completion is brought into question; (2) the updated construction schedule is thirty (30) days behind the planned or baseline schedule and no legitimate time extensions are in process; and (3) the Contractor desires to make changes in the logic (sequencing of work) or the planned duration of future activities of the schedule which, in the opinion of the Owner, are of a major nature. The plan of action, when required shall be submitted to the Owner for review within two (2) business days of the Contractor receiving the Owner's written demand. The recovery schedule, when required, shall be submitted to the Owner within five (5) calendar days of the Contractor's receiving the Owner's written demand. Failure to provide an updated construction schedule or a recovery schedule may be grounds for rejection of payment applications or withholding of funds as set forth in Article 11.

5.05 Subcontracts and Subcontractors

- A. Within thirty (30) days after award of the Contract, the Contractor shall submit to the Owner a list giving the names and addresses of Subcontractors and equipment and material suppliers Contractor proposes to use identifying the scope of each subcontractor's work. Should any subcontractor be disapproved by the Owner, the Owner shall submit its reasons for disapproval in writing to the Contractor. The Contractor shall submit a substitute for approval. The Owner shall act promptly in the approval of subcontractors, and when approval of the list is given, no changes of subcontractors will be permitted except for cause or reason considered justifiable by the Owner.
- B. The Owner will furnish to any subcontractor, upon request, evidence regarding amounts of money paid to the Contractor on account of the Subcontractor's work.

- C. The Contractor is and remains fully responsible for Contractor's own acts or omissions as well as those of any subcontractor or of any employee of either. The Contractor agrees that no contractual relationship exists between the Subcontractor and the Owner in regard to the Contract, and that the Subcontractor acts on this Work as an agent or employee of the Contractor.
- D. The Owner reserves the right to limit the amount of portions of work to be subcontracted as hereinafter specified.
- E. The Contractor agrees that the terms of these Contract Documents shall apply equally to each Subcontractor as to the Contractor, and the Contractor agrees to take such action as may be necessary to bind each Subcontractor to these terms. The Contractor further agrees to conform to the Code of Ethical Conduct as adopted by the Associated General Contractors of America, Inc., with respect to contractor-subcontractor relationships, and that payments to subcontractors shall be made in accordance with the provisions of N.C. Gen. Stat. § 143-134.1.

5.06 Royalties, Licenses, and Patents

- A. It is the intention of the Contract Documents that the Work covered herein will not constitute in any way infringement of any patent whatsoever unless the fact of such patent is clearly evidenced herein. The Contractor shall protect and save harmless the Owner against suit on account of alleged or actual infringement. The Contractor shall pay all royalties and/or license fees required on account of patented articles or processes, whether the patent rights are evidenced hereinafter.

5.07 Permits, Inspections, Fees, and Regulations

- A. The Contractor shall comply with the permits included in Appendix A.
- B. The Contractor shall 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, Contractor shall promptly notify the Owner in writing. See Instructions to Bidders, Paragraph 4, Modifications or Interpretation of Contract Documents, Paragraph 5, Substitutions and Paragraph 6, Addenda. Any necessary changes required after contract award shall be made by Change Order in accordance with Article 7. 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, Contractor shall bear all cost arising there from. Additional requirements implemented after bidding will be subject to equitable negotiations.
- C. All work under this Contract shall conform to State, local and national codes as are applicable. The cost of all required inspections and permits shall be the responsibility of the Contractor.

5.08 Protection of Work, Property, and the Public

- A. The Contractor shall be jointly responsible for the entire site and the building or construction of the same and provide all the necessary protections, as required by the Owner, and by laws or ordinances governing such conditions. Contractor shall be responsible for any damage to the Owner's property or of that of others on the job, by them, their personnel, or their subcontractors, and shall make good such damages. Contractor shall be responsible for and pay for any damages caused to the Owner. All contractors shall have access to the Project at all times.
- B. The Contractor shall provide cover and protect all trenching operations when the work is not in progress, whether constructed by Contractor or any of the Subcontractors. Any injury to the public or work damaged through the lack of proper protection or from any other cause, shall be the responsibility of the Contractor. Damages shall be repaired or replaced without extra cost to the Owner.
- C. No fires of any kind will be allowed inside or around the operations during the course of construction without special permission from the Owner.
- D. The Contractor shall protect all trees and shrubs designated to remain in the vicinity of the operations by building substantial boxes around same. Contractor shall barricade all walks, roads, etc., as directed by the Owner to keep the public away from the construction. All trenches, excavations or other hazards in the vicinity of the Work shall be well barricaded and properly lighted at night.
- E. The Contractor shall provide all necessary safety measures for the protection of all persons on the job, including the requirements of the A.G.C. *Accident Prevention Manual in Construction*, as amended, and shall fully comply with all state laws or regulations and North Carolina State Building Code requirements to prevent accident or injury to persons on or about the location of the work. The Contractor shall clearly mark or post signs warning of hazards existing, and shall barricade excavations. The Contractor shall protect against damage or injury resulting from falling materials and shall maintain all protective devices and signs throughout the progress of the Work.
- F. 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 II, June 24, 1974, *Federal Register*), and revisions thereto as adopted by Article 16 of Chapter 95 of North Carolina General Statutes.
- G. The Contractor shall designate a responsible member of Contractor's organization as safety inspector, whose duties shall include accident prevention on the Project. The name of the safety inspector shall be made known to the Owner at the time the work is started.

- H. In the event of emergency affecting the safety of life, the protection of work, or the safety of adjoining properties, the Contractor is hereby authorized to act at Contractor's own discretion, without further authorization from anyone, to prevent such threatened injury or damage. Any compensation claimed by the Contractor on account of such action shall be determined as provided for under Paragraph 9.02.

5.09 Shop Drawings, Submittals, Samples, and Data

- A. Within ten (10) consecutive calendar days after the Notice to Proceed, the Contractor shall submit a schedule for anticipated submission of all shop drawings, product data, samples, and similar submittals to the Owner. This schedule shall indicate the items, relevant specification sections, other related submittal, data, and the date when these items will be furnished to the Owner.
- B. The Contractor shall review, approve and submit to the Owner all Shop or Setting Drawings, Product Data, Samples, Color Charts, and similar submittal data required or reasonably implied by the Contract Documents. Required Submittals shall bear the Contractor's stamp of approval. Any exceptions to the Contract Documents shall be noted on the submittals. Copies of all submittals shall be of sufficient quantity for the Owner to retain up to three (3) copies of each submittal for Owner's own use plus additional copies as may be required by the Contractor. Submittals shall be presented to the Owner with reasonable promptness and time so as to cause no delay in the activities of the Owner or of separate Contractors.
- C. The Owner shall review required submittals promptly, noting desired corrections if any, and retaining three (3) copies for Owner's use. The remaining copies of each submittal shall be returned to the Contractor not later than fourteen (14) days from the date of receipt by the Owner for the Contractor's use or for corrections and resubmittal as noted by the Owner. When resubmittals are required, the submittal procedure shall be the same as for the original submittals.
- D. Approval of shop drawings by the Owner shall not be construed as relieving the Contractor from responsibility for compliance with the design or terms of the Contract Documents nor from responsibility of errors of any sort in the shop drawings, unless such lack of compliance or errors first have been called in writing to the attention of the Owner by the Contractor.

5.10 Use of Premises

- A. The Contractor shall confine Contractor's apparatus, the storage of materials and the operations of Contractor's workmen to limits indicated by law, ordinances, permits or directions of the Owner and shall not exceed those established limits in Contractor's operations.
- B. The Contractor shall not load or permit any part of the structure to be loaded with a weight that will endanger its safety.

- C. The Contractor shall enforce the Owner's instructions regarding signs, advertisements, fires and smoking.
- D. No firearms, any type of alcoholic beverage, or drugs (other than those prescribed by a physician) will be permitted at the job site.

5.11 Surveying

- A. The Contractor shall, if required, employ an engineer or a land surveyor licensed in the State of North Carolina to lay out the work and to establish a bench mark nearby in a location where same will not be disturbed and where direct instruments sights may be taken.

5.12 Land Disturbing Activity

- A. Any land-disturbing activity performed by the Contractor in connection with the Project shall comply with all erosion control measures set forth in the Contract Documents and any additional measures which may be required in order to ensure that the Project is in full compliance with the Sedimentation Pollution Control Act of 1973, as implemented by Title 15, North Carolina Administrative Code, Chapter 4, Sedimentation Control, Subchapters 4A, 4B and 4C, as amended (15 N.C.A.C. 4A, 4B and 4C).
- B. Upon receipt of notice that a land-disturbing activity is in violation of said act, the Contractor shall be responsible for ensuring that all steps or actions necessary to bring the Project in compliance with said act are promptly taken.
- C. The Contractor(s) shall be responsible for defending any legal actions instituted pursuant to N.C. Gen. Stat. § 113A-64 against any party or persons described in this Article.
- D. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, the Designer and the agents, consultants and employees of the Owner and Designer, from and against all claims, damages, civil penalties, losses and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from the performance of work or failure of performance of work, provided that any such claim, damage, civil penalty, loss or expense is attributable to a violation of the Sedimentation Pollution Control Act. Such obligation shall not be construed to negate, abridge or otherwise reduced any other right or obligation of indemnity which would otherwise exist as to any party or persons described in this Article.

5.12 Cutting, Patching, and Digging

- A. The Contractor shall do all cutting, fitting or patching of its Work that may be required to make its several parts come together properly and fit it to receive or be

received by Work of other contractors shown upon or reasonably implied by the drawings and specifications for the completed Work, as the Owner may direct.

- B. Any cost brought about by defective or ill-timed Work shall be borne by the party responsible therefor.
- C. No contractor shall endanger any work of another contractor by cutting, digging or other means. No contractor shall cut or alter the Work of any other contractor without the consent of the Owner and the affected contractor(s).

5.13 Cleaning Up and Finishing

- A. The Contractor shall keep surrounding area reasonably free from rubbish at all times, and shall remove debris from the Site on a timely basis or when directed to do so by the Owner. The Contractor shall provide an onsite refuse container(s). The Contractor shall remove Contractor's rubbish and debris from the site on a daily basis. The Contractor shall broom clean surfaces as required to minimize dust and dirt accumulation. The Contractor shall restore site to final grading and seeding conditions as shown on plans within seven (7) days.

5.14 Taxes

- A. Federal excise taxes do not apply to materials entering into this type of work (Internal Revenue Code, Section 3442(3)).
- B. Federal transportation taxes do not apply to materials entering into this type of work (Internal Revenue Code, Section 3475(b) as amended).
- C. North Carolina sales tax and use tax, as required by law, do apply to materials entering into this type of work and such costs shall be included in the Bid and Contract Sum.
- D. Local option sales and use taxes, as required by law, do apply to materials entering into this type of work as applicable and such costs shall be included in the Bid and Contract Sum.
- E. In order that the Owner may substantiate a refund claim for sales and use taxes, the Contractor shall furnish certified statements in triplicate, setting forth the cost of building materials, supplies and fixtures, and equipment which become a part of, or are annexed to any building or structure being erected, altered, or repaired under contract, with the Owner and the amount of sales and/or use taxes paid thereon.
- F. In the event the Contractor makes several purchases from the same vendor, such certified statements must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices, and the sales and use taxes paid thereon. Such statement must also include the cost of any tangible personal property

withdrawn from the Contractor's warehouse stock which is incorporated in the work, and the amount of sales and use tax paid thereon by the Contractor. The Contractor shall also obtain similar certified statements by Contractor's subcontractors and submit them to the Owner.

- G. Bidders are reminded that additional North Carolina Sales Tax is now collected on all sales within certain counties. Purchases within these counties will require separate certified statements for this tax. This statement shall give the vendors name, invoice number, total amount of invoice, date of invoice, the amount of the special tax paid, and the County in which the purchase was made. In the event the Contractor wishes to file a combined certified statement showing the tax and the local tax separately, this will be acceptable provided he gives the counties in which the additional tax was paid.
- H. This certified statement must be submitted to the Owner monthly, and all certified statements shall be submitted before final payment is made for work performed under this contract.

5.15 Continuing the Work

- A. Contractor shall continue the Work and maintain the Progress Schedule during all disputes or disagreements with the Owner. No Work shall be delayed or postponed pending resolution of any dispute or disagreement, except as permitted by Paragraph 12.02 or as Owner and Contractor otherwise agree in writing.

5.16 Guarantee

- A. 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 date of final acceptance of the Work and shall replace such defective materials or workmanship without cost to the Owner.
- B. 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.
- C. 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 final acceptance, whichever occurred first, in accordance with applicable law.

5.17 Indemnification

- A. The Contractor agrees to indemnify and hold harmless the Owner, the Designer and the agents, consultants and employees of the Owner and Designer from all loss, liability, claims or expense, including attorney's fees, arising out of or related to the Project and arising from bodily injury including death or property damage to any person or persons caused in whole or in part by the negligence or misconduct of the Contractor except to the extent same are caused by the negligence or misconduct of the Owner. It is the intent of this provision to require the Contractor to indemnify the Owner to the fullest extent permitted under North Carolina law.
- B. The Owner agrees to indemnify and hold harmless the Contractor and any subcontractors, agents, consultants and employees of the Contractor, from all loss, liability, claims or expense, including attorney's fees, arising out of or related to the Project and arising from bodily injury including death or property damage to any person or persons caused in whole or in part by the negligence or misconduct of the Owner except to the extent same are caused by the negligence or misconduct of the Owner. It is the intent of this provision to require the Owner to indemnify the Contractor to the fullest extent permitted under North Carolina law.

5.18 Assignments

- A. The Contractor shall not assign any portion of this Contract nor subcontract in its entirety. Except as may be required under terms of the performance bond or payment bond, no funds or sums of money due or become due the Contractor under the Contract may be assigned.

ARTICLE 6 – OTHER WORK AT THE SITE

6.01 Related Work

- A. The Owner may perform other work related to the Project at the Site with its own employees or through other contracts or may have other work performed by utility owners. If other work is not referenced in the Contract Documents, then Owner shall provide written notice of other work to Contractor prior to starting the other work.
- B. The Contractor shall provide access to the Site and coordinate the other work with the Contractor's Work.

6.02 Claims Between Contractors

- A. Should Contractor cause damage to the work or property of any other contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any other contractor against Contractor or Owner, then Contractor (without involving Owner) shall either (1) remedy the damage, (2) agree to compensate the other contractor for remedy of the damage, or (3) remedy the damage and attempt to settle with such other contractor by agreement, or otherwise resolve the dispute by arbitration or at law.

- B. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner, , and the officers, directors, partners, employees, agents and other consultants and subcontractors of each and any of them from and against all claims, costs, losses and damages (including, but not limited to, fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any other contractor against Owner, , or consultants to the extent said claim is based on or arises out of Contractor's performance of the Work. Should another contractor cause damage to the Work or property of Contractor or should the performance of work by any other contractor at the Site give rise to any other Claim, Contractor shall not institute any action, legal or equitable, against Owner or or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from Owner on account of any such damage or Claim.
- C. If Contractor is delayed at any time in performing or furnishing the Work by any act or neglect of another contractor, and Owner and Contractor are unable to agree as to the extent of any adjustment in Contract Times attributable thereto, Contractor may make a Claim for an extension of times in accordance with Article 8. An extension of the Contract Times shall be Contractor's exclusive remedy with respect to Owner for any delay, disruption, interference, or hindrance caused by any other contractor. This paragraph does not prevent recovery from Owner for activities that are its respective responsibilities.

ARTICLE 7 – OWNER'S RESPONSIBILITIES

7.01 Availability of Land

- A. Owner shall provide the Site and shall notify Contractor of any restrictions related to use of the Site in performing the Work.

7.02 Contract Administration

- A. The Owner shall provide general administration of the performance of construction contracts, including liaison and necessary inspection of the Work to ensure compliance with plans and specifications.

7.03 Site Visits

- A. The Owner will make periodic inspections of the Project at intervals appropriate to the stage of construction. The Owner will inspect the progress, the quality and the quantity of the Work.

- B. The Owner shall have access to the Work whenever it is in preparation and progress during normal working hours.

7.04 Clarifications and Detail Drawings

- A. In such cases where the nature of the Work requires clarification by the Owner, such clarification shall be furnished by the Owner with reasonable promptness by means of written instructions or detail drawings, or both. Clarifications and drawings shall be consistent with the intent of Contract Documents and shall become a part thereof.
- B. The Contractor and the Owner shall prepare, if deemed necessary, a schedule fixing dates upon which foreseeable clarifications will be required. The schedule will be subject to addition or change in accordance with progress of the Work. The Owner shall furnish drawings or clarifications in accordance with that schedule. The Contractor shall not proceed with the Work without such detail drawings and/or written clarifications.

7.05 Rejecting Defective Work

- A. The Owner or its authorized representative shall have the authority to reject Work which Owner believes to be defective or that Owner believes will not produce a completed Project that conforms to the Contract Documents. Owner or its authorized representative shall also have the authority to require special inspection or testing of the Work if the Work has been covered contrary to written request or if the Owner considers it necessary to observe the covered Work

ARTICLE 8 - CONTRACT TIMES

8.01 Contract Times

- A. Contract Times are stated in Paragraph 3 of the Agreement Between the Owner and Contractor for Construction. The Contractor, upon Notice of Award, shall prepare a Progress Schedule to complete the Project within the Contract Times as required by this Article.
- B. The Contractor will be required to mobilize and commence work within twenty (20) days of written Notice to Proceed. The Contractor will be penalized for each day the Contractor fails to begin work as described in Paragraph 4 of the Agreement Between the Owner and Contractor for Construction. Likewise, failure to complete the Project within the Contract Times will result in an assessment of the same Liquidated Damages.

8.02 Delays

- A. If the Contractor is delayed at any time in the progress of Contractor's work by any act or negligence of the Owner, by any separate contractor employed by the Owner;

by changes ordered in the Work; by labor disputes at the Project Site; by abnormal weather conditions not reasonably anticipated for the locality where the Work is performed; by unavoidable casualties; by any causes beyond the Contractor's control; or by any other causes which the Owner determine may justify the delay, then the Contract Time may be extended by Change Order for the time which the Owner may determine is reasonable.

8.03 Extensions

- A. Time extensions will not be granted for rain, wind, snow or other natural phenomena of normal intensity for the locality where Work is performed. For purpose of determining extent of delay attributable to unusual weather phenomena, a determination shall be made by comparing the weather for the Contract Time involved with the average of the preceding five (5) year climatic range during the same time interval based on the National Oceanic and Atmospheric Administration National Weather Service statistics for the locality where Work is performed and on daily weather logs kept on the job site by the Contractor reflecting the effect of the weather on progress of the Work.. Time extensions for weather delays do not entitle the Contractor to "extended overhead" recovery.
- B. Request for extension of time shall be made in writing within ten (10) days following cause of delay. In case of continuing cause for delay, the Contractor shall notify the Owner of the delay within 10 days of the beginning of the delay and only one claim is necessary.
- C. The Contractor shall notify its Surety in writing of extension of time granted.
- D. No claim shall be allowed on account of failure of the Owner to furnish drawings or instructions until twenty (20) days after demand for such drawings and/or instructions. See Paragraph 5.09.

ARTICLE 9 – CHANGES IN THE WORK; CLAIMS

9.01 Owner Changes

- A. The Owner may have changes made in the Work covered by the Contract. These changes will not invalidate and will not relieve or release the Contractor from any guarantee given by the Contractor pertinent to the Contract Documents. These changes will not affect the validity of the guarantee bond and will not relieve the Surety or Sureties of said bond. All extra work shall be executed under conditions of the original contract.

9.02 Contractor Changes

- A. Except in an emergency endangering life or property, no change shall be made by the Contractor without receipt of approved Change Order or written Field Order from the

Owner authorizing such change. No claim for adjustments of the Contract Price shall be valid unless this process is followed.

- B. Field Order, transmitted by email, fax or hand-delivered, may be used where the change involved impacts the critical path of the Work. A formal Change Order shall be issued within the time stated on the Field Order.
- C. In the event of emergency endangering life or property, the Contractor may be directed to proceed on a time and material basis whereupon the Contractor shall proceed and keep accurately on such form as may be required, a correct account of costs together with all proper invoices, payrolls and supporting data. Upon completion of the Work, the Change Order will be prepared as outlined under either Method "9.03.A.1" or Method " 9.03.A.2" or both.

9.03 Determining Value of Changes

- A. In determining the values of changes, either additive or deductive, the Contractor is restricted to the use of the following methods:
 - 1. Where the extra work involved is covered by unit prices quoted in the Bid, the value of the change shall be computed by application of unit prices based on quantities, estimated or actual as agreed of the items involved, except in such cases where a quantity exceeds the estimated quantity allowance in the Contract by one hundred percent (100%) or more. In such cases, either party may elect to proceed under subparagraph 9.03.A.2 herein. If neither party elects to proceed under 9.03.A.2, then unit prices shall apply.
 - 2. The contracting parties shall negotiate and agree upon the equitable value of the change prior to issuance of the Change Order, and the Change Order shall stipulate the corresponding lump sum adjustment to the Contract Price.
- B. Under Paragraph 9.02.A and Method "9.03.A.2" above, the allowances for overhead and profit combined shall not exceed twenty percent (20%) of net cost except where the change involves a subcontractor; allowance shall not exceed fifteen percent (15%) for the subcontractor; and ten percent (10%) for the Contractor. Under Method "9.03.A.1", no additional allowances shall be made for overhead and profit. In the case of deductible Change Orders, under Method "9.03.A.2" and Paragraph 9.02.A above, the Contractor shall include no less than five percent (5%) profit, but no allowances for overhead.
- C. The term "net cost" as used herein shall mean the difference between all proper cost additions and deductions. The "cost" as used herein shall be limited to the following:
 - 1. The actual costs of materials and supplies incorporated or consumed as part of the project;
 - 2. The actual costs of labor expended on the project site;

3. The actual costs of labor burden, limited to the costs of social security (FICA) and Medicare/Medicaid taxes; unemployment insurance costs; health/dental/vision insurance premiums; paid employee leave for holidays, vacation, sick leave, and/or petty leave, not to exceed a total of 30 days per year; retirement contributions; worker's compensation insurance premiums; and the costs of general liability insurance when premiums are computed based on payroll amounts; the total of which shall not exceed forty percent (40%) of the actual costs of labor;
 4. The actual costs of rental for tools, excluding hand tools; equipment; machinery; and temporary facilities required for the project;
 5. The actual costs of premiums for bonds, insurance, permit fees, and sales or use taxes related to the project.
 6. Overtime and extra pay for holidays and weekends may be a cost item only to the extent approved by the Owner.
- D. Should concealed conditions be encountered in the performance of the Work below grade, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents, the contract sum and time for completion may be equitably adjusted by Change Order upon claim by either party made within thirty (30) days after the condition has been identified. The cost of such change shall be arrived at by one of the foregoing methods.

All Change Orders shall be supported by a breakdown showing method of arriving at net cost as defined above.

- E. In all Change Orders, the procedure will be for the Owner to request proposals for the Change Order work in writing. The Contractor will provide such proposal and supporting data in suitable format. The Owner shall verify correctness. Within fourteen (14) days after receipt of the Contractor's proposal, the Owner shall prepare the Change Order and forward to the Contractor for Contractor's signature or otherwise respond, in writing, to the Contractor's proposal. Within seven (7) days after receipt of the Change Order executed by the Contractor, the Owner shall, certify final approval. Upon Owner approval, all remaining copies are sent to Contractor and Contractor's Surety. In case of emergency or extenuating circumstances, approval of changes may be obtained verbally by telephone or Field Orders approved by all parties, which then shall be substantiated in writing as outlined under normal procedure.
- F. At the time of signing a Change Order, the Contractor shall be required to certify as follows:

Contractor certifies that Surety Company will be notified forthwith that Contract has been changed in the amount of this Change Order and that a copy of the approved Change Order will be mailed upon receipt by Contractor to Surety Company.

- G. A Change Order, when issued, shall be full compensation, or credit, for the Work included, omitted or substituted. It shall show on its face the adjustment in time for completion of the Project as a result of the change in the Work.
- H. If, during the progress of the Work, the Owner requests a Change Order and the Contractor's terms are unacceptable, the Owner may require the Contractor to perform such Work on a time and material basis in accordance with Paragraph 9.02.C above. Without prejudice, nothing in this Paragraph shall preclude the Owner from performing or to have performed that portion of the Work requested in the Change Order.

9.04 Claims for Extra Cost

- A. Should the Contractor consider that as a result of any instructions given in any form by the Owner, the Contractor is entitled to extra cost above that stated in the Contract, the Contractor shall give written notice thereof to the Owner within seven (7) days without delay, and shall not proceed with the Work affected until further advised, except in emergency involving the safety of life or property, which condition is covered in Paragraph 9.02.C and Paragraph 5.08.H. No claims for extra compensation will be considered unless the claim is so made. The Owner shall render a written decision within seven (7) days of receipt of claim.
- B. The Contractor shall not act on instructions received by Contractor from persons other than the Owner and any claims for extra compensation or extension of time on account of such instruction will not be honored. The Owner will not be responsible for misunderstandings claimed by the Contractor of verbal instructions which have not been confirmed in writing, and in no case shall instructions be interpreted as permitting a departure from the Contract Documents unless such instruction is confirmed in writing and supported by a properly authorized Change Order.
- C. Should a claim for extra compensation by the Contractor be denied by the Owner, the Contractor may pursue his claim in accordance with the provisions of N.C. Gen. Stat. § 143-135.3 and the following:
 - 1. A contractor who has not completed a contract with a board for construction or repair work and who has not received the amount Contractor claims is due under the Contract may submit a verified written claim to the Owner for the amount the Contractor claims is due. The Owner may deny, allow or compromise the claim, in whole or in part. A claim under this subsection is not a contested case under Chapter 150B of the General Statutes.
 - 2. (a) A contractor who has completed a contract with a board for construction or repair work and who has not received the amount he claims is due under the Contract may submit a verified written claim to the Owner for the amount the Contractor claims is due. The claim shall be submitted within sixty (60) days after

the Contractor receives a final statement of the board's disposition of his claim and shall state the factual basis for the claim.

(b) The Owner shall investigate a submitted claim within ninety (90) days of receiving the claim, or within any longer time period upon which the Owner and the Contractor agree. The Contractor may appear before the Owner, either in person or through counsel, to present facts and arguments in support of Contractor's claim. The Owner may allow, deny or compromise the claim, in whole or in part. The Owner shall give the Contractor a written statement of the Owner's decision on the Contractor's claim.

(c) A contractor who is dissatisfied with the Owner's decision on a claim submitted under this subsection may commence a contested case on the claim under Chapter 150B of the General Statutes. The contested case shall be commenced within sixty (60) days of receiving the Owner's written statement of the decision.

(d) As to any portion of a claim that is denied by the Owner, the Contractor may, in lieu of the procedures set forth in the preceding subsection of this section, within six (6) months of receipt of the Owner's final decision, institute a civil action for the sum he claims to be entitled to under the Contract by filing a verified complaint and the issuance of a summons in the Superior Court of Onslow County or in the superior court of any county where the work under the contract was performed. The procedure shall be the same as in all civil actions except that all issues shall be tried by the judge, without a jury.

9.05 Minor Changes in the Work

- A. The Owner's representative will have the authority to order minor changes in the Work not involving an adjustment in the contract sum or time for completion, and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order, and shall be binding on the Owner and the Contractor.

ARTICLE 10 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

10.01 Notice of Defects

- A. Prompt notice of Defective Work of which the Owner or Owner's representative(s) has actual knowledge will be given to the Contractor. Defective Work may be rejected, corrected or accepted.

10.02 Access to Site

- A. It is a condition of this Contract that the Work shall be subject to inspection during normal working hours by the authorized representative of the Owner, and those

persons required by state law to test special work for official approval. The Contractor shall therefore provide safe access to the work at all times for such inspections.

10.03 Test and Inspections

- A. All instructions to the Contractor will be made only by or through the Owner or its authorized representative.
- B. Where special inspection or testing is required by virtue of any state laws, instructions of the Owner, specifications or codes, the Contractor shall give adequate notice to the Owner of the time set for such inspection or test, if the inspection or test will be conducted by a party other than the Owner. Such special tests or inspections will be made in the presence of the Owner, or its authorized representative, and it shall be the Contractor's responsibility to serve ample notice of such tests.
- C. All laboratory tests shall be paid by the Owner unless provided otherwise in the Contract Documents except:
 - 1. the Contractor shall pay for laboratory tests to establish design mix for concrete; and
 - 2. for additional tests to prove compliance with Contract Documents where materials have tested deficient except when the testing laboratory did not follow the appropriate ASTM testing procedures.
- D. Should any Work be covered up or concealed prior to inspection and approval by the Owner, such work shall be uncovered or exposed for inspection, if so requested by the Owner in writing. Inspection of the Work will be made promptly upon notice from the Contractor. All cost involved in uncovering, exposure, inspection and testing, repairing, replacing, recovering and restoring to design condition, the Work that has been covered or concealed will be paid by the Contractor
- E. If any other portion of the Work has been covered which the Owner has not specifically requested to observe prior to being covered, the Owner may request to see such work and it shall be uncovered by the Contractor. If such work be found in accordance with the Contract Documents the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner. If such work be found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that the condition was caused by the Owner, in which event the Owner shall be responsible for the payment of such costs.

10.04 Correction of the Work

- A. Any work, materials, fabricated items or other parts of the Work which have been condemned or declared not in accordance with the Contract Documents by the Owner shall be promptly removed from the Work Site by the Contractor, and shall be

immediately replaced by new work in accordance with the Contract Documents at no additional cost to the Owner. Work or property of other contractors or the Owner, damaged or destroyed by virtue of such defective work, shall be made good at the expense of the Contractor whose work is defective.

- B. Correction of defective work shall commence within twenty-four (24) hours after receipt of notice from the Owner and shall make satisfactory progress until completed.
- C. Should the Contractor fail to proceed with the required corrections, then the Owner may complete the Work in accordance with the provisions of Article 28.

10.05 Correction of Work After Final Payment

- A. Neither the Final Certificate, Final Payment, Occupancy of the Premises by the Owner, nor any provision of the Contract Documents, nor any other act or instrument of the Owner, nor the Designer, shall relieve the Contractor from responsibility for negligence, or defective material or workmanship, or failure to comply with the drawings and specifications. Contractor shall correct or make good any defects due thereto and repair any damage resulting therefrom, which may appear during the guarantee period following final acceptance of the Work except as stated otherwise under Paragraph 5.14, Guarantee. The Owner will report any defects as they may appear to the Contractor and establish a time limit for completion of corrections by the Contractor. The Owner will be the judge as to the responsibility for correction of defects.

10.06 Acceptance of Defective Work

- A. Should the correction of defective work be considered inadvisable or inexpedient by the Owner, the Owner shall be reimbursed by the Contractor. A Change Order will be issued to reflect a reduction in the contract sum.

10.07 Owner's Right to Do Work

- A. If, during the progress of the Work or during the period of guarantee, the Contractor fails to prosecute the Work properly or to perform any provision of the Contract Documents, the Owner, after fifteen (15) days' written notice sent by certified mail, return receipt requested, to the Contractor from the Owner, may perform or have performed that portion of the Work. The cost of the Work may be deducted from any amounts due or to become due to the Contractor, such action and cost of same having been first approved by the Owner. Should the cost of such action of the Owner exceed the amount due or to become due the Contractor, then the Contractor or Contractor's Surety, or both, shall be liable for and shall pay to the Owner the amount of said excess.

ARTICLE 11 – PAYMENTS TO CONTRACTOR AND COMPLETION

11.01 Application for Payment

- A. The Contractor shall submit to the Owner an Application for Payment for work done during once the project is complete.
- B. The Contractor, upon request of the Owner, shall substantiate the request with invoices of vouchers or payrolls or other evidence.
- C. Prior to submitting the first request, the Contractor shall prepare for the Owner a schedule showing a breakdown of the Contract Price into values of the various parts of the Work, so arranged as to facilitate payments to subcontractors in accordance with Article 5. The Contractor shall list the value of each Subcontractor and supplier.

11.03 Final Inspection, Acceptance, and Project

- A. Upon notification from the Contractor that the Project is substantially complete and ready for inspection, the Owner shall make a preliminary final inspection to verify that the Project is substantially complete and ready for final inspection. Prior to final inspection, the Contractor shall complete all items requiring corrective measures noted at the preliminary inspection. The Owner shall schedule a final inspection at a time and date acceptable to the Owner and the Contractor.
- B. At the final inspection, the Owner shall, if job conditions warrant, record a list of items that are found to be incomplete or not in accordance with the Contract Documents (the "Punch List"). At the conclusion of the final inspection, the Owner shall make the following determinations:
 - 1. That the Project is completed and accepted.
 - 2. That the Project is accepted subject to the Punch List). All punch list items must be completed within thirty (30) days of acceptance or the Owner may invoke Paragraph 10.07, Owner's Right to Do Work.
 - 3. That the Project is not complete and another date for a final inspection will be established.
- C. Within fourteen (14) days of acceptance per Paragraph 11.03.B.1 or within fourteen (14) days after completion of Punch List per Paragraph 11.03.B.2 above, the Owner shall certify the Work and issue applicable Certificate of Compliance.
- D. Any discrepancies listed or discovered after the date of final inspection and acceptance under Paragraphs 11.03.B.1 or 11.03.B.2 above shall be handled in accordance with Paragraph 5.16.
- E. The date of acceptance will establish the following:
 - 1. The beginning of guarantees and warranties period.

2. The date on which the Contractor's insurance coverage for public liability, property damage and builder's risk may be terminated.
3. That no liquidated damages (if applicable) shall be assessed after this date.
4. The termination date of utility cost to the Contractor.

11.04 Partial Utilization/Beneficial Occupancy

- A. The Owner may not occupy or utilize all or a portion of the Project except for inspections until the work is substantially complete.

11.05 Final Payment

- A. The making and acceptance of Final Payment shall constitute a waiver of all claims by the Contractor except those claims previously made and remaining unsettled (Article 9).
- B. Prior to submitting Request for Final Payment to the Owner for approval, the Contractor shall fully comply with all requirements specified in Paragraph 11.03. The Contractor shall also provide the following:
 1. Submittal of Product and Operating Manuals, Warranties and Bonds, Guarantees, Maintenance Agreements, As-Built Drawings, Certificates of Inspection or Approval from agencies having jurisdiction.
 2. Record of Owner's training.
 3. Resolution of any final inspection discrepancies.
- C. The Contractor shall forward to the Owner, the Final Application for Payment along with the following documents:
 1. Affidavit of Release of Liens.
 2. Affidavit of Contractors of Payment to Material Suppliers and Subcontractors. (See Paragraph 11.06).
 3. Consent of Surety to Final Payment.
 4. Certificates of state agencies required by state law.
- D. The Owner will not authorize final payment until the Work under Contract has been certified by the Owner, Certificates of Compliance issued, and the Contractor has complied with the closeout requirements. The Contractor shall forward the Contractor's Final Application for Payment to the Owner along with respective certificate(s) of compliance required by law.

11.06 Contractor's Affidavit of Payment to Material Suppliers and Subcontractors

- A. The final payment of retained amount due the Contractor on account of the Contract shall not become due until the Contractor has furnished to the Owner an affidavit signed, sworn and notarized to the effect that all payments for materials, services or

subcontracted work in connection with this Contract have been satisfied, and that no claims or liens exist against the Contractor in connection with this Contract. In the event that the Contractor cannot obtain similar affidavits from subcontractors to protect the Contractor and the Owner from possible liens or claims against the Subcontractor, the Contractor shall state in Contractor's affidavit that no claims or liens exist against any Subcontractor to the best of Contractor's knowledge, and if any appear afterward, the Contractor shall save the Owner harmless.

11.07 Payments Withheld

A. The Owner may withhold payment for the following reasons:

1. Faulty work not corrected.
2. The unpaid balance on the contract is insufficient to complete the work in the judgment of the Owner.
3. To provide for sufficient contract balance to cover liquidated damages that will be assessed.

B. The Owner may authorize the withholding of payment for the following reasons:

1. Claims filed against the Contractor or evidence that a claim will be filed.
2. Evidence that subcontractors have not been paid.

C. When grounds for withholding payments have been removed, payment will be released. Delay of payment due the Contractor without cause will make Owner liable for payment of interest to the Contractor as provided in N.C. Gen. Stat. § 143-134.1.

ARTICLE 12 – SUSPENSION OF WORK AND TERMINATION

12.01 If the Contractor fails to begin the Work under the Contract within the time specified, or the progress of the Work is not maintained on schedule, or the Work is not completed within the Contract Times, or fails to perform the Work with sufficient workmen and equipment or with sufficient materials to ensure the prompt completion of said Work, or shall perform the Work unsuitably or shall discontinue the prosecution of the Work, or if the Contractor shall become insolvent or be declared bankrupt or commit any act of bankruptcy or insolvency, or allow any final judgment to stand against Contractor unsatisfied for a period of forty-eight (48) hours, or shall make an assignment for the benefit of creditors, or for any other cause whatsoever shall not carry on the Work in an acceptable manner, the Owner may give notice in writing, sent by certified mail, return receipt requested, to the Contractor and Contractor's Surety of such delay, neglect or default, specifying the same, and if the Contractor within a period of fifteen (15) days after such notice shall not proceed in accordance therewith, then the Owner shall, declare this Contract in default, and, thereupon, the Surety shall promptly take over the Work and complete the performance of this Contract in the manner and within the Contract Times.

In the event the Surety shall fail to take over the Work to be done under this Contract within fifteen (15) days after being so notified and notify the Owner in writing, sent by certified mail, return receipt requested, that Surety is taking the same over and stating that Surety will diligently pursue and complete the same, the Owner shall have full power and authority, without violating the Contract, to take the prosecution of the Work out of the hands of said Contractor, to appropriate or use any or all contract materials and equipment on the grounds as may be suitable and acceptable and may enter into an agreement, either by public letting or negotiation, for the completion of said Contract according to the terms and provisions thereof or use such other methods as in Owner's opinion shall be required for the completion of said Contract in an acceptable manner. All costs and charges incurred by the Owner, together with the costs of completing the Work under contract, shall be deducted from any monies due or which may become due said Contractor and Surety. In case the expense so incurred by the Owner shall be less than the sum which would have been payable under the Contract, if it had been completed by said Contractor, then the said Contractor and Surety shall be entitled to receive the difference, but in case such expense shall exceed the sum which would have been payable under the Contract, then the Contractor and the Surety shall be liable and shall pay to the Owner the amount of said excess.

12.02 Contractor's Right to Stop Work or Terminate the Contract

- A. Should the Work be stopped by order of a court having jurisdiction, or by order of any other public authority for a period of three (3) months, due to cause beyond the fault or control of the Contractor, or if the Owner should fail or refuse to make payment on account of a certificate issued by the Owner within thirty (30) days after receipt of same, then the Contractor, after fifteen (15) days' written notice sent by certified mail, return receipt requested, to the Owner, may suspend operations on the Work or terminate the Contract.
- B. The Owner shall be liable to the Contractor for the cost of all materials delivered and Work performed on this Contract plus 20 percent overhead and profit and shall make such payment.

ARTICLE 13 – DISPUTE RESOLUTION

13.01 Owner provides the following dispute resolution process pursuant to N.C. Gen. Stat. § 143-128(f). This process shall be made available to the Owner, Contractor, Subcontractors, as well as Sub-subcontractors and is a precondition to initiation of litigation concerning a dispute.

13.02 For the purposes of this process, a dispute is limited to the recovery of monetary damages exceeding \$15,000 from the same transaction or occurrence against a single Party or two or more Parties alleged to be liable jointly, severally or in the alternative. Two or more

disputes may not be considered or other combined without the consent of all Parties to such disputes.

13.03 This dispute resolution process is based on non-binding mediation and will only be effective to the extent that the parties to any mediated dispute participate in the mediation in good faith. Owner is under no obligation under any circumstance to secure or enforce the participation of any other party in the mediation of any dispute subject to N.C. Gen. Stat. § 143-128(f1).

13.04 Mediation shall be a pre-condition to initiating litigation concerning the dispute. During the pendency of any dispute and after a determination thereof, the parties to the dispute shall act in good faith to mitigate any potential damages including utilization of construction schedule changes and alternate means of construction.

13.05 Dispute Resolution Process

A. This process shall be used to resolve any disputed issues arising out of a building erection, construction, alteration, or repair project where the amount of the controversy exceeds \$15,000. Disputes seeking non-monetary recovery or a monetary recovery of less than \$15,000 are not subject to mediation.

B. Prior to requesting mediation, a Party must form a good faith belief that it is entitled under applicable law to recover the monetary amount to be included in the request from one or more of the remaining Parties. Such belief must be based on a reasonable and prudent investigation into the dispute that is the subject of the request. The request for mediation must be based on such investigation and may not include any amount or the name of any remaining Party, unless supported by such investigation and good faith belief by the Party requesting the mediation. If a Party breaches any provision of this section, it shall indemnify and hold harmless all other Parties from any costs, including reasonable attorney fees and other costs of litigation, and damages incurred by such other Parties that arise from such breach.

C. If the parties to the dispute are able to agree on a mediator or a process for selection of a mediator for the conference, they shall also schedule a date for the mediation, which shall be conducted within 30 days of the request for mediation.

D. If the parties to the dispute are unable to agree on a mediator for the conference the mediator shall be selected according to the following procedure:

1. The name of a certified mediator in the North Carolina Judicial District 1 shall be selected at random from among a list of all mediators certified in District 1 according to the local rules for Civil Superior Court, Judicial District 1.
2. In the event the mediator selected is unable to serve, the random selection process shall continue until a mediator is selected who can serve.
3. Upon selection of a mediator by this method, the mediator shall schedule a date for mediation which shall be conducted within 30 days of the selection.

- E. The parties to the dispute shall participate in a mediated dispute settlement. The mediation shall be held in The Town of Emerald Isle, North Carolina.
- F. If, as a result of mediation, a voluntary settlement is reached and the parties to the dispute agree that such settlement shall be reduced to writing, the mediator shall be deemed appointed and constituted an arbitrator for the sole purpose of signing the mediated settlement agreement. Such agreement shall be and shall have the same force and effect as an arbitration award, and judgement may be entered upon it in accordance with applicable law in any court of competent jurisdiction.
- G. If the disputed issue cannot be resolved in mediation or either party disagrees with the results of the mediation, the parties may seek resolution in the General Court of Justice in the County of Onslow and the State of North Carolina. If a party fails to comply in strict accordance with the requirements of this process, the non-complying party specifically waives all of its rights provided hereunder, including its rights and remedies under State law.

13.06 Dispute of Contract Times

- A. A dispute seeking the extension of any time limit set forth in the Agreement between the Owner and the Contractor to construct the Project shall be subject to mediation pursuant to this Article and N.C. Gen. Stat. § 143-128(f1), but only if the disputed extension is denied. To the extent that liquidated damages are set forth in such agreement as the measurement of damages for failure by such Party to meet such time limit, such liquidated damages shall be the exclusive standard for determining the amount of damages associated with such dispute.

13.07 Expenses

- A. All expenses incurred by a Party to a dispute in preparing and presenting any claim or defense at the mediation shall be paid by the Party. Such expenses include without limitation preparation and production of witnesses and exhibits and attorney fees.
- B. All other expenses of the mediation, including filing fees and required traveling and other expenses of the mediator, shall be borne as follows: one half by the Party requesting the mediation, with the remaining parties paying equal shares of the remaining expenses and costs; provided that, if the Owner is named as a party to the mediation, the Owner shall pay at least one-third of the mediation expenses and costs divided among the Parties. If more than one Party to a dispute requests a mediation, the mediation expenses and costs to be divided among the Parties shall be borne equally by the Parties to the dispute; provided that, if the Owner is named as a party to the mediation, the Owner shall pay at least one-third of the mediation expenses and costs divided among the Parties.

ARTICLE 14 – MISCELLANEOUS

14.01 Governing Law

- A. This Contract shall be governed by the laws of the State of North Carolina. Jurisdiction and venue for any litigation arising out of or involving this Contract shall lie in the North Carolina General Court of Justice in Onslow County, North Carolina, and such litigation shall be brought only in such courts. All pronouns used herein shall refer to every gender.

14.02 Headings

- A. Headings or titles in this Contract are only for convenience and shall have no meaning or effect upon the interpretation of the provisions of this Contract.

14.03 Equal Opportunity Clause

- A. 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 Contractor agrees not to discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee 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.

14.04 Clean Air Act

- A. Where this Contract exceeds \$100,000 the Contractor shall comply with all the requirements of the Clean Air Act (42 U.S.C. §7414) and Section 308 of the Water Pollution Control Act (33 U.S.C. §1318) relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 of the Clean Air Act and Section 308 of the Water Pollution Control Act and all regulations and guidelines issued thereunder after the award of the contract. In so doing the Contractor further agrees:
 - 1. As a condition for the award of contract, to notify the Owner of the receipt of any communication from the Environmental Protection Agency (EPA) indicating that a facility to be utilized in the performance of the contract is under consideration to be listed on the EPA list of Violating Facilities. Prompt notification is required prior to contract award.
 - 2. To certify that any facility to be utilized in the performance of any nonexempt contractor subcontract is not listed on the EPA list of Violating Facilities pursuant to 40 CFR Part 32 as of the date of contract award.

3. To include or cause to be included the above criteria and the requirements in every nonexempt subcontract and that the Contractor will take such action as the Government may direct as a means of enforcing such provisions.

BID FORM

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

The undersigned, as Bidder, hereby declares that the only person or persons interested in this bid as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this Bid or in the contract to be entered into; that this Bid is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud.

The Bidder further declares that Bidder has examined the site of the Work and the Contract Documents relative thereto, and that Bidder as satisfied itself relative to the Work to be performed.

The Bidder proposes and agrees if this bid is accepted to contract with The Town of Emerald Isle, in the form of contract specified below, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary to complete the construction for which a bid is shown, in full accordance with the plans, specifications and contract documents, to the full and entire satisfaction of The Town of Emerald Isle with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the Contract Documents, for the sum as set forth hereinafter.

The Bidder further proposes and agrees hereby to commence work under this Contract on a date to be specified in a written order by the Owner and shall fully complete all work thereunder within the time specified in the Agreement. Applicable liquidated damages amount is as stated in the Agreement.

The Bidder further agrees that in the case of failure on Bidder's part to execute the said contract and the bonds within ten (10) consecutive calendar days after being given written notice of the award of contract, the certified check, cash or bid bond accompanying this bid shall be paid into the funds of the Owner's account set aside for the project, as liquidated damages for such failure; otherwise the certified check, cash or bid bond accompanying this proposal shall be returned to the undersigned.

Acknowledgement of Addendum:

Addendum No. 1	_____	Addendum No. 3	_____	Addendum No. 5	_____	Addendum No. 7	_____
Addendum No. 2	_____	Addendum No. 4	_____	Addendum No. 6	_____	Addendum No. 8	_____

Bid Schedule:

In the following Bid, the total bid amount shall be written in both words and figures. In case of discrepancy between words and figures, words shall govern.

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

Liquidated Damages: **\$500.00** each consecutive calendar day

Time of Completion: 60 Calendar **Days from Notice to Proceed (NTP)**.

Item Number	Description	Quantity	Unit	Unit Price	Total
1	Mobilization/Demobilization	1	LS		
2	Clearing and Grubbing	1	LS		
3	Misc. Demo	1	LS		
4	Traffic Control	1	LS		
5	Surveying	1	LS		
6	Asphalt Pavement Removal	1	LS		
7	Asphalt Pavement Patch	1	LS		
8	Staging Area Setup and Repair	1	LS		
9	18" HDPE Pipe ADS N12 WT IB System	1	LS		
10	Bedding Material	1	LS		
11	Misc. Utility Coord.	1	LS		
12	Misc. Grading	1	LS		
13	Misc. Seed and Straw	1	LS		
14	Pond Outlet Structure	1	LS		
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
Total Bid Amount (Items 1 thru 28)					

(Bid amount above to reflect total cost to construct project depicted on plans dated November 18, 2022)

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

The project will be awarded to the lowest bidder that will meet the available budget. The available budget for the project minus contingencies will be stated by the Town at the bid opening and will be utilized to determine the lowest bidder. If all bids exceed the available budget, the Town reserves the right to cancel the bid or enter into negotiations with the apparent low bidder. If the negotiations fail, the Town may elect to enter into negotiations with the second low bidder or re-bid the project.

DESCRIPTION OF BID ITEMS
FOR
EMERALD SUBDIVISION POND OUTLET STRUCTURE REPLACEMENT /
IMPROVEMENT EMERALD ISLE, NC

All items include labor, material, equipment, incidentals, and installation of component listed complete and as shown on construction drawings.

Detailed descriptions of items follow:

1. Mobilization/Demobilization: Shall include procurement, mobilization, and removal all equipment required throughout the duration of the project.
2. Clearing and Grubbing: Shall include removal of vegetation for site preparation.
3. Misc. Demo: Shall include removal of existing inlet structure and portion of existing pipe on the pond side as required to abandon the remainder of the pipe in place per the plans. Demolition of the existing boardwalk and any cuts required for open placement of new discharge pipe.
4. Traffic Control: Coordinate with the Town of Emerald Isle to identify requirements.
5. Surveying: Will include all construction stakeout and as-built profiles of the constructed system.
6. Asphalt Pavement Removal: Shall include asphalt cut in a neat appearance and removal for installing piping under roadway.
7. Asphalt Pavement Patch: Includes asphalt pavement patches as shown in the Plans and Specifications.
8. Staging Area Setup and Repair: Coordinate with the Town of Emerald Isle to identify requirements.
9. 18" Corrugated Dual Wall HDPE Pipe: Includes 18" corrugated pipe, without perforations, used in the drainage systems, including fittings, and installation.
10. Bedding Material shall be in accordance with the standards and specifications.
11. Misc. Utility Coord.: Shall include all time associated with coordination with utilities within the project area.
12. Misc. Grading: Shall include all miscellaneous grading required to construct the site as shown in the Plans.
13. Misc. Seed and Straw: Includes miscellaneous seed and straw to match surrounding lawns and to repair disturbed areas.
14. Pond outlet structure: Includes fabricated stormwater pond outlet control device per drawings.

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

Attachments to this Bid:

The following documents are submitted with and made a condition of this Bid:

- A. Required Bid Security in the form of a Bid Bond, Cash or Certified Check
- B. E-Verify Affidavit

Respectfully submitted on this the ____ day of _____, 2022, by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____

(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____

By: _____

(Signature of general partner – attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____

State of Corporation: _____

Type (General Business, Profession, Service, Limited Liability): _____

By: _____

(Signature – attach evidence of authority to sign)

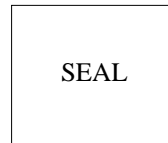
Name (typed or printed): _____

Title: _____

Attest: _____

(Signature of Corporate Secretary)

Date of Qualification to do business in North Carolina is: ___/___/_____



A Joint Venture

Name of Joint Venture: _____

First Joint Venture Name: _____

By: _____
(Signature of joint venture partner - attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venture Name: _____

By: _____
(Signature of joint venture partner - attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is party to the venture should be in the manner indicated above.)

Bidder's Business Address:

Business Phone No. (_____) _____

Business E-Mail Address _____

N.C. General Contractor's License Number: _____

BID BOND

BIDDER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

Town of Emerald Isle, North Carolina
7500 Emerald Drive, Emerald Isle, NC 28594

BID:

Due Date:

Project Name and Location:

BOND:

Date:

Penal Sum of _____ \$ _____

_____, **Bidder**, and
_____, **Surety**, who is duly licensed
to act as Surety in North Carolina, are held and firmly bound unto **The Town of Emerald Isle, Owner**, in
the penal sum of _____ (\$ _____) DOLLARS, lawful money of the
United States of America, for the payment of which well and truly to be made, Bidder and Surety bind
ourselves, our heirs, executors, administrators, successors and assigns jointly and severally, firmly by
these presents.

SIGNED, SEALED AND DATED THIS ____ day of _____, 2022.

WHEREAS, the said Bidder is herewith submitting a Bid for “Emerald Subdivision Pond Outlet Structure Replacement / Improvement” and the Bidder desires to file this bid bond in lieu of making the cash deposit as required by N.C. Gen. Stat. § 143-129.

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that if the Bidder shall be awarded the Contract for which the Bid is submitted and shall execute the Contract and give bond for the faithful performance thereof within ten (10) days after the award of same to the Bidder; then this obligation shall be null and void; but if the Bidder fails to so execute such Contract and give performance bond as required by N.C. Gen. Stat. § 143-129, the Surety shall pay the Owner the amount set forth in the first paragraph hereof. Provided further, that the Bid may be withdrawn as provided by N.C. Gen. Stat. § 143-129.1

BIDDER

SURETY

_____(SEAL)

_____(SEAL)

Bidder's Name

Surety Name

By:

By:

Signature

Signature

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

The Town of Emerald Isle E-Verify Affidavit

STATE OF NORTH CAROLINA

AFFIDAVIT:
E-VERIFY COMPLIANCE

TOWN OF EMERALD ISLE

I, _____(the individual attesting below), being duly authorized by and on behalf of _____ (the entity bidding on project hereinafter "Employer") after being first duly hereby swears or affirms as follows:

- 1. Employer understands that E-Verify is the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law in accordance with NCGS § 64-25(5).
2. Employer understands that Employers Must Use E-Verify. Each employer, after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS § 64-26(a).
3. Employer is a person, business entity, or other organization that transacts business in this State and employs 25 or more employees in this State. (mark Yes or No)

a. YES _____, or

b. NO _____.

4. Employers subcontractors comply with E-Verify, and if Employer is the winning bidder on this project, Employer will ensure compliance by providing the County with an E-Verify Compliance Affidavit for any subcontractors current or subsequently hired by Employer.

This ____ day of _____, 20____.

Signature of Affiant: _____

Print or Type Name: _____

Contractor: _____

State of _____

County of _____

Signed and sworn to (or affirmed) before me, this the ____ day of _____, 20____.

Notary Public
My Commission Expires:

Affix
Official/Notary Seal)

NORTH CAROLINA
TOWN OF EMERALD ISLE

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION

THIS AGREEMENT is by and between The Town of Emerald Isle (“Owner”) and _____ (“Contractor”). Owner and Contractor in consideration of the mutual covenants set forth herein, agree as follows:

1. Project Name. The Project for the Work under the Contract Documents is described as follows:

***Emerald Subdivision Pond Outlet Structure Replacement / Improvement
Town of Emerald Isle, North Carolina***

2. Scope of Work. Contractor shall complete all Work as specified in the Contract Documents. The Work is generally described as follows:

The Project consists of Demolition of existing pond outlet structure, abandoning-in-place the existing stormwater discharge pipe and construction of a new outlet structure and discharge pipe. Removal of existing boardwalk and incidental grading. Rebuilding/Replacement boardwalk may be negotiated with the Town of Emerald Isle outside of these drawings.

3. Contract Times. The Work to be performed under this Agreement shall be substantially completed within **60** consecutive calendar days from the Owner’s issuance of the written Notice to Proceed.

4. Liquidated Damages. Contractor and Owner recognize that time is of the essence and that the Owner will suffer financial and other losses if the Contractor fails to begin the Work within twenty (20) days of Notice to Proceed or the Work is not completed within **60** days of the Notice to Proceed. The parties also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$500.00 per day for each day that expires after the **60**-day completion period.

5. Contract Price. Owner shall pay Contract for completion of the Work, subject to additions and deductions, in accordance with the Contract Documents, as follows:

For all work a Lump Sum Bid amount of:

6. Payment Procedures.

6.01 Submittal and Processing of Payments. Contractor shall submit Applications for Payment in accordance with Article 11 of the General Conditions.

6.02 Progress Payments; Retainage. In accordance with Article 11 of the General Conditions of the Contract, the Owner shall review, and if approved, process the Contractor's pay request within 30 days upon receipt from the Contractor. The Owner, after reviewing and approving said pay request, shall make payments to the Contractor on the basis of a duly certified and approved estimate of work performed during the preceding calendar month by the Contractor, less five percent (5%) of the amount of such estimate which is to be retained by the Owner until all work has been performed strictly in accordance with this Agreement and until such work has been accepted by the Owner. The Owner may elect to waive retainage requirements after fifty percent (50%) of the Work has been satisfactorily completed on schedule as referred to in Article 11 of the General Conditions.

6.03 Final Payment. Upon submission by the Contractor of evidence satisfactory to the Owner that all payrolls, material bills and other costs incurred by the Contractor in connection with the construction of the Work have been paid in full, final payment on account of this Agreement shall be made within thirty (30) days after the completion by the Contractor of all work covered by this Agreement and the acceptance of such work by the Owner.

7. Contract Documents. The Contract Documents consist of the following:

7.01 The Contract Documents consist of the following:

- a. This Agreement
- b. Notice to Bidders
- c. Instructions to Bidders
- d. General Conditions
- e. Drawings consisting of 6_ sheets with sheets bearing the following general title:
 - 1) Cape Emerald Subdivision Pond Outlet Structure & Pipe Realignment
- f. Addenda (numbers _ to _ inclusive)
- g. Performance Bond
- h. Payment Bond
- i. Technical Specifications
- j. Exhibits to this Agreement:
 - Notice of Award

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

- Contractor's Bid
- W-9 Form
- E-Verify Affidavit
- Certificate of Insurance

k. The following which may be delivered or issued on or after the effective date of the Agreement and are not attached hereto:

- Notice to Proceed
- Change Order(s)
- Application for Payment
- Certificate of Substantial Completion

7.02 There are no Contract Documents other than those listed above.

7.03 The Contract Documents may only be amended, modified or supplemented as provided in Article 9 of the General Conditions.

8. E-Verify. The Contractor attests that it and all of its subcontractors have fully complied with all requirements of Article 2 of Chapter 64 of the N.C. General Statutes.

9. Divestment and Do-Not-Contract. The Contractor certifies that, as of the execution of this Agreement, it is not on the Sudan (Darfur), Iran, or Companies Boycotting Israel Final Divestment and Do-Not-Contract Lists as created by the State Treasurer pursuant to N.C. Gen. Stat. §§ 147-86.42, 147-86.57, and 147-86.80. In compliance with the requirements of the Sudan Divestment Act, Iran Divestment Act, and Companies Boycotting Israel Act, the Contractor shall not utilize in the performance of the Agreement any subcontractor that is identified on the Final and Divestment and Do-Not-Contract Lists. The undersigned hereby certifies that he or she is authorized by the vendor or bidder listed above to make the foregoing statement.

10. Severability. If any provision of this Agreement is determined to be unenforceable, invalid or illegal, then the enforceability, validity and legality of the remaining provisions will not in any way be affected or impaired, and such provision will be deemed to be restated to reflect the original intentions of the parties as nearly as possible in accordance with applicable law.

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

IN WITNESS WHEREOF, Owner and Contractor have executed this Agreement on this the _____ day of _____, 2022, written in three (3) counterparts, each of which shall without proof or accounting for other counterparts, be deemed an original contract.

OWNER:

CONTRACTOR:

By:

By:

Title: Town Manager

Title:

[CORPORATE SEAL]

[CORPORATE SEAL]

Attest: _____

Attest: _____

Title: _____

Title: _____

Designated Representatives:

Designated Representatives:

Name: Matt Zapp

Name:

Title: Town Manager

Title:

License No. (where applicable):

(If Contractor is a corporation or a partnership,
attach evidence of authority to sign.)

Address for giving notices:

Address for giving notices:

7500 Emerald Drive
Emerald Isle, NC 28594

This instrument has been preaudited in the manner
required by the Local Government Budget and Fiscal Control Act.

Laura Rotchford
Finance Officer

PERFORMANCE BOND

Date of Contract: _____

Date of Execution: _____

Name of Principal:
(Contractor) _____

Name of Surety: _____

Name of Contracting Body: **Town of Emerald Isle, North Carolina**

Amount of Bond: _____

Project: **Emerald Subdivision Pond Outlet Structure Replacement / Improvement
Emerald Isle, North Carolina**

KNOW ALL MEN BY THESE PRESENTS, that we, the Principal and Surety above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind, ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into a certain contract with the Contracting Body, identified as shown above and hereto attached:

NOW, THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the contracting body, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Executed in ____ counterparts.

Witness:

Contractor

(Proprietorship or Partnership)

By: _____

Attest: (Corporation)

Title: _____
(Owner, Partner, Corp. Pres. or Vice Pres. Only)

By: _____

Title: _____
(Corp. Secretary or Asst. Secretary Only)

(Corporate Seal)

Surety Company

Witness:

By: _____

Title: _____
(Attorney in Fact)

Countersigned:

(Surety Corporate Seal)

(N.C. Licensed Resident Agent)

Name and Address - Surety Agency

Performance Bond

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

Surety Company Name and N.C.
Regional or Branch Office Address

Performance Bond

PAYMENT BOND

Date of Contract: _____

Date of Execution: _____

Name of Principal:
(Contractor) _____

Name of Surety: _____

Name of Contracting Body: **Town of Emerald Isle, North Carolina**

Amount of Bond: _____

Project: **Emerald Subdivision Pond Outlet Structure Replacement /
Improvement
Emerald Isle, North Carolina**

KNOW ALL MEN BY THESE PRESENTS, that we, the Principal and Surety above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into a certain contract with the Contracting Body identified as shown above and hereto attached:

NOW, THEREFORE, if the Principal shall promptly make payment to all persons supplying labor/material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Executed in _____ counterparts.

Witness:

(Proprietorship or Partnership)

Attest: (Corporation)

By: _____

Title: _____
(Corp. Secretary or Asst. Secretary Only)

Contractor

By: _____

Title: _____
(Owner, Partner, Corp. Pres. or Vice Pres. Only)

(CORPORATE SEAL)

Witness:

Surety Company

By: _____

Title: _____
(Attorney in Fact)

Countersigned:

(Surety Corporate Seal)

(N.C. Licensed Resident Agent)

Name and Address - Surety Agency

Surety Company Name and N.C.
Regional or Branch Office Address

CONSENT OF SURETY COMPANY TO FINAL PAYMENT

**PROJECT: Emerald Subdivision Pond Outlet Structure Replacement / Improvement
Emerald Isle, North Carolina**

CONTRACT DATE: _____

TO: **Town of Emerald Isle, North Carolina** (Owner)

CONTRACT FOR: _____ (Type of Work)

CONTRACTOR: _____ (Name)

_____ (Address)

In accordance with the provisions of the Agreement between the Owner and the Contractor as indicated above, the (insert name and address of Surety Company), **SURETY COMPANY**, on bond of (insert name and address of Contractor), **CONTRACTOR**, hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety Company of any of its obligations to The **Town of Emerald Isle, North Carolina, OWNER**, as set forth in said surety company's bond.

IN WITNESS WHEREOF, the Surety Company has hereunto set its hand this ___day of _____, 20__.

Surety Company

Signature of Authorized Representative

Attest:

Title

(Seal)

CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

**PROJECT: Emerald Subdivision Pond Outlet Structure Replacement / Improvement
Emerald Isle, North Carolina**

CONTRACT DATE: _____

TO: **Town of Emerald Isle, North Carolina** (Owner)

CONTRACT FOR: _____ (Type of Work)

STATE OF: **North Carolina**

COUNTY OF: **Carteret**

The undersigned, pursuant to the General Conditions of the Contract, hereby certifies that to the best of Contractor's knowledge, information and belief, the Releases or Waivers of Lien attached hereto include the Contractor, all subcontractors, all suppliers of materials and equipment, and all performers of work, labor, or services who have or may have liens against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

SUPPORTING DOCUMENTS
ATTACHED HERETO:

CONTRACTOR:

Contractor

Address

By: _____
Signature

Print Name and Title

Subscribed and sworn to before me this
_____ Day of _____, 20____

Signature Notary Public

My Commission Expires: _____

CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

**PROJECT: Emerald Subdivision Pond Outlet Structure Replacement / Improvement
Emerald Isle, North Carolina**

CONTRACT DATE: _____

TO: **Town of Emerald Isle, North Carolina** (Owner)

CONTRACT FOR: _____ (Type of Work)

STATE OF: **North Carolina**

COUNTY OF: **Carteret**

The undersigned, pursuant to the General Conditions of the Contract, hereby certifies that Contractor has paid in full or has otherwise satisfied all obligations for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damage arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Contractor's property might in any way be held responsible.

SUPPORTING DOCUMENTS ATTACHED HERETO:

- 1. Consent of Surety to Final Payment. Whenever Surety is involved, Consent of Surety is required. Indicate attachment: (Yes ___) (No ___).

The following supporting documents should be attached hereto if required by the Owner:

- a. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
- b. Separate Releases or Waivers of Liens from subcontractors and material and equipment suppliers to the extent required by the owner, accompanied by a list thereof.
- c. Contractor's Affidavit of Release of Liens.

CONTRACTOR:

Contractor

Address

By: _____
Signature

Print Name and Title

Subscribed and sworn to before me this
___ Day of _____, 20___

Signature Notary Public

My Commission Expires: _____

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

DIVISION 01 – SPECIAL CONDITIONS

SECTION 01000

SPECIAL CONDITIONS

PART 1 GENERAL

1.1 PROJECT DESCRIPTION

The project consists of 18" (Nominal Dimension) Dual Wall HDPE pipe to be installed by open cut / direct installation. Other site work includes grading, temporary shoring, excavation, installation of drain pipe, pavement construction, demolition/removal of existing board walk and driveways, seeding, and erosion control. Existing drainage structure will be removed. Existing storm drainage pipe will remain in place. Existing pipe will be capped at the pond's exist and flowable fill will be used to abandon-in-place the pipe within the ROW. The pipe on private property will be capped at the ROW per plans and abandoned-in-place without flowable fill. Contractor may not encroach on neighboring private property outside the HOA-owned land/easements for any portion of the project.

1.2 DEFINITIONS

Owner: Town of Emerald Isle
 cc. Matt Zapp
 7500 Emerald Drive
 Emerald Isle, North Carolina 28594

Designer: Moffatt & Nichol
 4700 Falls of Neuse Road
 Suite 300
 Raleigh, North Carolina 27609

1.3 CONSTRUCTION STAKE OUT

1.3.1 Alignment and Control

The Designer will provide a base line for construction alignment and a bench mark for elevations datum.

1.3.2 Stake Out

The Contractor shall furnish and perform all construction stake out from the Engineer Control Points, and shall be totally responsible to construct the work in accordance with the plans and specifications. The Designer's checking grade and offset stake out shall in no way relieve the Contractor of his responsibility.

1.3.3 Relocation

The Owner or the Designer shall have the right to move, adjust, or relocate any pipeline prior to actual construction. Where lines are relocated, the Contractor will have his layout crew profile the new centerline of the pipeline and turn into the Designer a copy of his field notes which, subject to checking, will be used for payment purposes. Notes shall be dated and signed by the Surveyor.

1.4 OTHER UTILITIES

The Designer has attempted to identify the existing utilities on the plans where known. The Contractor shall contact the representative of all utility owners within the construction area, orally or in writing, not less than two (2) or more than ten (10) working days prior to starting to excavate.

1.5 LIST OF DRAWINGS

The following drawings are included as part of these contract documents:

Sheet No.	Title
G-001	Cover Sheet
G-002	General Notes, Abbreviations, and Legend
V-101	Existing Conditions
D-101	Demolition Plan
C-101	Site Plan
C-500	Civil Details

1.6 MAINTENANCE OF TRAFFIC

Traffic is to be maintained as agreed to by the contractor and the Town of Emerald Isle.

1.7 SUBCONTRACTORS

In the interest of assuring the most expeditious and properly controlled project, it is a condition of this contract that the Bidder must accomplish not less than 25 percent of the work to be done with his own forces. Subcontractors must work directly under the contractor's Superintendent. This shall in no way prohibit the use of rental equipment by the Contractor's forces. All equipment and personnel shall be subject to approval of the Designer. In determining the value of subcontracts, the value of materials and equipment installed by the subcontractor shall be included.

1.8 PRE-CONSTRUCTION CONFERENCE

After award of contract and before beginning operations, a pre-construction conference shall be held by the Designer with the Contractor to review job requirements and method of operations planned by the Contractor.

1.9 LIQUIDATED DAMAGES

Should any Contractor fail to begin his work within twenty (20) days from written Notice to Proceed or to complete his work by the end of the contract period, liquidated damages may be assessed in the amount of **\$500.00** per day for each consecutive calendar day thereafter in which the project has yet to begin or is incomplete. Each Contractor fully understands the importance of completing the project on time and agrees to pay any liquidated damages which may be assessed as described herein.

1.10 WORK RESTRICTIONS

No Work Time Restrictions.

The Contractor will not be allowed to block ingress or egress into the driveways on the weekends.

1.11 TIME OF COMPLETION

All work shall be completed within 60 calendar days of Notice to Proceed.

1.12 REQUIRED RECORD ON SALES AND USE TAX

In order that the Owner may substantiate a refund claim for sales and use taxes, the Contractors shall furnish certified statements in triplicate, setting forth the cost of building materials, supplies and fixtures, and equipment which become a part of, or are annexed to any building or structure being erected, altered, or repaired under contract, with the Owner and the amount of sales and/or use taxes paid thereon.

In the event the Contractor makes several purchases from the same vendor, such certified statements must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices, and the sales and use taxes paid thereon. Such statement must also include the cost of any tangible personal property withdrawn from the Contractor's warehouse stock which is incorporated in the work, and the amount of sales and use tax paid thereon by the Contractor. The Contractor shall also obtain similar certified statements by his subcontractors and submit them to the Owner.

Bidders are reminded that additional North Carolina Sales Tax is now collected on all sales within certain counties. Purchases within these counties will require separate certified statements for this tax. This statement shall give the vendors name, invoice number, total amount of invoice, date of invoice, the amount of the special tax paid, and the County in which the purchase was made. In the event the Contractor wishes to file a combined certified statement

showing the tax and the local tax separately, this will be acceptable provided he gives the counties in which the additional tax was paid.

This certified statement must be submitted to the Owner monthly, and all certified statements shall be submitted before final payment is made for work performed under this contract.

1.15 PHOTOGRAPH PROJECT SITE

The Contractor shall photograph or video the project site and staging areas in its entirety before construction begins, with emphasis on EACH INDIVIDUAL property adjoining the project, drives, trees, buildings, parking lots, landscaping, appurtenances, utility located markings, initial survey stake locations, and other distinguishing features. A digital log shall be prepared which includes a brief description of the location of each photograph with additional description of the property and physical features for each photograph. The Contractor shall provide two copies of the visual records in Compact Disk (CD) format to the Engineer for review and acceptance prior to commencement of construction. Construction shall not commence until the digital records of the project site are approved in writing by the Engineer. No separate payment will be made for this work, and all associated costs will be considered incidental to other items in the contract.

1.17 IRRIGATION IMPACTS

The locations of private irrigation systems are not located. The Contractor shall be responsible for the replacement or repair of irrigation systems that are damaged during construction.

End of Section

TECHNICAL SPECIFICATIONS

DIVISION 02220 – DEMOLITION

SECTION 02220

DEMOLITION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2008) Safety and Health Requirements Manual

1.2 GENERAL REQUIREMENTS

Do not begin demolition until authorization is received from the Owner. Remove rubbish and debris from the project site. The work includes demolition, salvage of identified items and materials, and removal of resulting rubbish and debris. Rubbish and debris shall be removed unless otherwise directed, to avoid accumulation at the demolition site. Materials that cannot be removed daily shall be stored in areas specified by the Owner. In the interest of occupational safety and health, the work shall be performed in accordance with EM 385-1-1, Section 23, Demolition, and other applicable Sections. In the interest of conservation, salvage shall be pursued to the maximum extent possible.

1.3 SUBMITTALS

The following shall be submitted in accordance with the General Conditions of the Contract.

Certificates

Demolition plan

Submit proposed demolition and removal procedures to the Owner for approval before work is started.

1.4 DUST AND DEBRIS CONTROL

Prevent the spread of dust and debris, and avoid the creation of a nuisance or hazard in the surrounding area. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, ice, flooding, or pollution. Sweep pavements as often as necessary to control the spread of debris.

1.5 PROTECTION

1.5.1 Traffic Control Signs

Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights. Notify the Owner prior to beginning such work.

1.5.2 Existing Work

Before beginning any demolition work, the Contractor shall survey the site and examine the drawings and specifications to determine the extent of the work. The Contractor shall take necessary precautions to avoid damage to existing items to remain in place, to be reused, the property of the Owner; any damaged items shall be repaired or replaced as approved by the Owner. The Contractor shall coordinate the work of this section with all other work and shall construct and maintain shoring, bracing, and supports as required. The Contractor shall ensure that structural elements are not overloaded and shall be responsible for increasing structural supports or adding new supports as may be required as a result of any cutting, removal, or demolition work performed under this contract. Do not overload pavements to remain. Provide new supports and reinforcement for existing construction weakened by demolition or removal work. Repairs, reinforcement, or structural replacement must have Owner approval.

1.5.3 Trees

Trees within the project site which might be damaged during demolition, and which are indicated to be left in place, shall be protected. Any tree designated to remain that is damaged during the work under this contract shall be replaced in kind or as approved by the Owner.

1.5.4 Facilities

Protect electrical and mechanical services and utilities. Where removal of existing utilities and pavement is specified or indicated, provide approved barricades, temporary covering of exposed areas, and temporary services or connections for electrical and mechanical utilities. The Contractor shall ensure that no elements determined to be unstable are left unsupported and shall be responsible for placing and securing bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.

1.6 BURNING

The use of burning at the project site for the disposal of refuse and debris will **NOT** be permitted.

1.7 RELOCATIONS

Perform the removal and reinstallation of relocated items as indicated with workmen skilled in the trades involved. Repair items to be relocated which are damaged or replace damaged items with new undamaged items as approved by the Owner's Representative.

1.8 REQUIRED DATA

Demolition plan shall include procedures for careful removal and disposition of materials specified to be salvaged, coordination with other work in progress, a disconnection schedule of utility services, and a detailed description of methods and equipment to be used for each operation and of the sequence of operations. The procedures shall provide for safe conduct of the work in accordance with EM 385-1-1.

1.9 USE OF EXPLOSIVES

Use of explosives will **NOT** be permitted.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 EXISTING FACILITIES TO BE REMOVED

3.1.1 Utilities and Related Equipment

Temporarily support existing utilities uncovered and maintain service or provide new line to maintain service where temporary supports are not feasible. Remove existing utilities, as indicated or uncovered by work and terminate in a manner conforming to the nationally recognized code covering the specific utility and approved by the Owner. When utility lines are encountered that are not indicated on the drawings, the Owner shall be notified prior to further work in that area. Remove meters and related equipment and deliver to a location as directed by the Owner. If utility lines are encountered that are not shown on drawings, contact the Owner for further instructions.

3.1.2 Paving and Slabs

Remove concrete and asphaltic concrete paving and slabs as indicated to a depth of 12 inches below existing grade. Provide neat sawcuts at limits of pavement removal as indicated.

3.1.3 Patching

Where removals leave holes and damaged surfaces exposed in the finished work, patch and repair these holes and damaged surfaces to match adjacent finished surfaces. Where new work is to be applied to existing surfaces, perform removals and patching in a manner to produce surfaces suitable for receiving new work. Finished surfaces of patched area shall be flush with

the adjacent existing surface and shall match the existing adjacent surface as closely as possible as to texture and finish.

3.2 FILLING

Holes and other hazardous openings shall be filled in accordance with Section 02300, "EARTHWORK".

3.3 DISPOSITION OF MATERIAL

3.3.1 Title to Materials

Except where specified in other sections, all materials and equipment removed, and not reused, shall become the property of the Contractor and shall be removed. Title to materials resulting from demolition, and materials and equipment to be removed, is vested in the Contractor upon approval by the Owner of the Contractor's demolition and removal procedures, and authorization by the Owner to begin demolition. The Owner will not be responsible for the condition or loss of, or damage to, such property after contract award. Materials and equipment shall not be viewed by prospective purchasers or sold on the site.

End of Section

TECHNICAL SPECIFICATIONS

DIVISION 02231 – CLEARING AND GRUBBING

SECTION 02231

CLEARING AND GRUBBING

PART 1 - GENERAL

1.1 DELIVERY, STORAGE, AND HANDLING

Deliver materials to store at the site, and handle in a manner which will maintain the materials in their original manufactured or fabricated condition until ready for use.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.1 PROTECTION

3.1.1 Roads and Walks

Coordinate with the Town of Emerald Isle for road closures.

3.1.2 Trees, Shrubs, and Existing Facilities

Trees and vegetation to be left standing shall be protected from damage incident to clearing, grubbing, and construction operations by the erection of barriers or by such other means as the circumstances require.

3.1.3 Utility Lines

Protect existing utility lines that are indicated to remain from damage. Notify the Owner immediately of damage to or an encounter with an unknown existing utility line. The Contractor shall be responsible for the repairs of damage to existing utility lines that are indicated or made known to the Contractor prior to start of clearing and grubbing operations. When utility lines which are to be removed are encountered within the area of operations, the Contractor shall notify the Owner in ample time to minimize interruption of the service.

3.2 CLEARING

Clearing shall consist of the incidental trimming and cutting of trees into sections and the satisfactory disposal of the trees and other vegetation designated for removal. It is not anticipated that trees, stumps, or roots, will be present in the construction area.

End of Section

TECHNICAL SPECIFICATIONS

DIVISION 02300 – EARTHWORK

SECTION 02300

EARTHWORK

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION
OFFICIALS (AASHTO)

AASHTO T 180	(2001; R 2004) Moisture-Density Relations of Soils Using a (10-lb) Rammer and an (18-in) Drop
AASHTO T 224	(2001; R 2004) Correction for Coarse Particles in the Soil Compaction Test

ASTM INTERNATIONAL (ASTM)

ASTM C 33	(2008) Concrete Aggregates
ASTM C 136	(2006) Sieve Analysis of Fine and Coarse Aggregates
ASTM D 422	(1963; R 2007) Particle-Size Analysis of Soils
ASTM D 698	(2007e1) Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/cu. ft.)
ASTM D 1140	(2000; R 2006) Amount of Material in Soils Finer than the No. 200 Sieve
ASTM D 1556	(2007) Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D 1557	(2007) Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/cu. ft.)
ASTM D 2434	(1968; R 2006) Permeability of Granular Soils (Constant Head)
ASTM D 2487	(2006e1) Soils for Engineering Purposes (Unified Soil Classification System)

ASTM D 4318 (2005) Liquid Limit, Plastic Limit, and Plasticity Index of Soils

ASTM D 6938 (2007a) Standard Test for In-place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES JULY 2006

SECTION 1042 (2006) Rip Rap Materials

1.2 DEFINITIONS

1.2.1 Satisfactory Materials

Satisfactory materials shall comprise any materials classified by ASTM D 2487 as GW, GP, GM, GP-GM, GW-GM, GC, GP-GC, GM-GC, SW, SP, SM, SW-SM, SC, SW-SC, SP-SM, SP-SC, CL, ML, CL-ML, CH, MH. Satisfactory materials for grading shall be comprised of stones less than 8 inches, except for fill material for pavements and railroads which shall be comprised of stones less than 3 inches in any dimension.

1.2.2 Unsatisfactory Materials

Materials which do not comply with the requirements for satisfactory materials are unsatisfactory. Unsatisfactory materials also include man-made fills; trash; refuse; backfills from previous construction; and material classified as satisfactory which contains root and other organic matter or frozen material. The Owner shall be notified of any contaminated materials.

1.2.3 Cohesionless and Cohesive Materials

Cohesionless materials include materials classified in ASTM D 2487 as GW, GP, SW, and SP. Cohesive materials include materials classified as GC, SC, ML, CL, MH, and CH. Materials classified as GM and SM will be identified as cohesionless only when the fines are nonplastic. Testing required for classifying materials shall be in accordance with ASTM D 4318, ASTM C 136, ASTM D 422, and ASTM D 1140.

1.2.4 Degree of Compaction

Degree of compaction required, except as noted in the second sentence, is expressed as a percentage of the maximum density obtained by the test procedure presented in ASTM D 1557 abbreviated as a percent of laboratory maximum density. Since ASTM D 1557 applies only to soils that have 30 percent or less by weight of their particles retained on the 3/4 inch sieve, the degree of compaction for material having more than 30 percent by weight of their particles

retained on the 3/4 inch sieve shall be expressed as a percentage of the maximum density in accordance with AASHTO T 180 Method D and corrected with AASHTO T 224. To maintain the same percentage of coarse material, the "remove and replace" procedure as described in the NOTE 8 in Paragraph 7.2 of AASHTO T 180 shall be used.

1.2.5 Topsoil

Material suitable for topsoils obtained from excavations is defined as: Natural, friable soil representative of productive, well-drained soils in the area, free of subsoil, stumps, rocks larger than one inch diameter, brush, weeds, toxic substances, and other material detrimental to plant growth. Amend topsoil pH range to obtain a pH of 5.5 to 7.

1.2.6 Hard/Unyielding Materials

Weathered rock, dense consolidated deposits, or conglomerate materials which are not included in the definition of "rock" but which usually require the use of heavy excavation equipment, ripper teeth, or jack hammers for removal.

1.2.7 Rock

Solid homogeneous interlocking crystalline material with firmly cemented, laminated, or foliated masses or conglomerate deposits, neither of which can be removed without systematic drilling and blasting, drilling and the use of expansion jacks or feather wedges, or the use of backhoe-mounted pneumatic hole punchers or rock breakers; also large boulders, buried masonry, or concrete other than pavement exceeding 1/2 cubic yard in volume. Removal of hard material will not be considered rock excavation because of intermittent drilling and blasting that is performed merely to increase production.

1.2.8 Unstable Material

Unstable material shall consist of materials too wet to properly support the utility pipe, conduit, or appurtenant structure.

1.2.9 Select Granular Material

1.2.9.1 General Requirements

Select granular material shall consist of materials classified as GW, GP, SW, SP, by ASTM D 2487 where indicated. The liquid limit of such material shall not exceed 35 percent when tested in accordance with ASTM D 4318. The plasticity index shall not be greater than 12 percent when tested in accordance with ASTM D 4318, and not more than 35 percent by weight shall be finer than No. 200 sieve when tested in accordance with ASTM D 1140. Coefficient of permeability shall be a minimum of 0.002 feet per minute when tested in accordance with ASTM D 2434.

1.2.10 Initial Backfill Material

Initial backfill shall consist of select granular material or satisfactory materials free from rocks.

1.3 CLASSIFICATION OF EXCAVATION

No consideration will be given to the nature of the materials, and all excavation will be designated as unclassified excavation.

1.4 CRITERIA FOR BIDDING

Base bids on the following criteria:

- a. Surface elevations are as indicated.
- b. Pipes or other artificial obstructions, except those indicated, will not be encountered.
- c. Hard materials and rock will not be encountered .

PART 2 PRODUCTS

2.1 REQUIREMENTS FOR OFFSITE SOILS

Offsite soils brought in for use as backfill shall be tested for TPH, BTEX and full TCLP including ignitability, corrosivity and reactivity. Backfill shall contain a maximum 100 parts per million (ppm) of total petroleum hydrocarbons (TPH) and a maximum 10 ppm of the sum of Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) and shall pass the TCPL test. TPH concentrations shall be determined by using EPA 600/4-79/020 Method 418.1. BTEX concentrations shall be determined by using EPA SW-846.3-3 Method 5030/8020. TCLP shall be performed in accordance with EPA SW-846.3-3 Method 1311. Provide Borrow Site Testing for TPH, BTEX and TCLP from a composite sample of material from the borrow site, with at least one test from each borrow site. Material shall not be brought on site until tests have been approved by the Owner.

2.2 MATERIAL FOR RIP-RAP

Provide Dissipator Pad material to current NCDOT Specifications for construction indicated.

2.2.1 Bedding Material

Consisting of sand, gravel, or crushed rock, well graded, or poorly graded with a maximum particle size of 2 inches. Material shall be composed of tough, durable particles. Fines passing the No. 200 standard sieve shall have a plasticity index less than six.

2.2.2 Rock

Rock fragments sufficiently durable to ensure permanence in the structure and the environment in which it is to be used. Rock fragments shall be free from cracks, seams, and other defects that would increase the risk of deterioration from natural causes. The size of the fragments shall meet the requirements specified in NCDOT Specification Section 1042 for the class indicated. Specific gravity of the rock shall be a minimum of 2.50. The inclusion of more than trace 1 percent quantities of dirt, sand, clay, and rock fines will not be permitted.

PART 3 EXECUTION

3.1 GENERAL EXCAVATION

The Contractor shall perform excavation of every type of material encountered within the limits of the project to the lines, grades, and elevations indicated and as specified. Grading shall be in conformity with the typical sections shown and the tolerances specified in paragraph FINISHING. Satisfactory excavated materials shall be transported to and placed in fill or embankment within the limits of the work. Unsatisfactory materials encountered within the limits of the work shall be excavated below grade and replaced with satisfactory materials as directed. Such excavated material and the satisfactory material ordered as replacement shall be included in excavation. Surplus satisfactory excavated material not required for fill or embankment shall be disposed of in areas approved for surplus material storage or designated waste areas. Unsatisfactory excavated material shall be disposed of in designated waste or spoil areas. During construction, excavation and fill shall be performed in a manner and sequence that will provide proper drainage at all times. Material required for fill or embankment in excess of that produced by excavation within the grading limits shall be excavated from the borrow areas indicated or from other approved areas selected by the Contractor as specified.

3.1.1 Trench Excavation Requirements

The trench shall be excavated as recommended by the manufacturer of the pipe to be installed. Trench walls below the top of the pipe shall be sloped, or made vertical, and of such width as recommended in the manufacturer's installation manual. Where no manufacturer's installation manual is available, trench walls shall be made vertical. Trench walls more than 3 feet high shall be shored, cut back to a stable slope, or provided with equivalent means of protection for employees who may be exposed to moving ground or cave-in. Vertical trench walls more than 5 feet high shall be shored. Trench walls which are cut back shall be excavated to at least the angle of repose of the soil. Special attention shall be given to slopes which may be adversely affected by weather or moisture content. The trench width below the top of pipe shall not exceed 24 inches plus pipe outside diameter (O.D.) for pipes of less than 24 inches inside diameter (I.D.). Where recommended trench widths are exceeded, redesign, stronger pipe, or special installation procedures shall be utilized by the Contractor. The cost of redesign, stronger pipe, or special installation procedures shall be borne by the Contractor without any additional cost to the Owner.

3.2.5.1 Bottom Preparation

The bottoms of trenches shall be accurately graded to provide uniform bearing and support for the bottom quadrant of each section of the pipe. Bell holes shall be excavated to the necessary size at each joint or coupling to eliminate point bearing. Stones of 3 inches or greater in any dimension, or as recommended by the pipe manufacturer, whichever is smaller, shall be removed to avoid point bearing.

3.2.5.2 Removal of Unyielding Material

Where unyielding material is encountered in the bottom of the trench, such material shall be removed 6 inches below the required grade and replaced with suitable materials as provided in paragraph BACKFILLING AND COMPACTION.

3.2.5.3 Removal of Unstable Material

Where unstable material is encountered in the bottom of the trench, such material shall be removed to the depth directed and replaced to the proper grade with select granular material as provided in paragraph BACKFILLING AND COMPACTION. When removal of unstable material is required due to the Contractor's fault or neglect in performing the work, the resulting material shall be excavated and replaced by the Contractor without additional cost to the Owner.

3.2.5.4 Excavation for Appurtenances

Excavation for manholes, catch-basins, inlets, or similar structures shall be of sufficient size to permit the placement and removal of forms for the full length and width of structure footings and foundations as shown. Rock shall be cleaned of loose debris and cut to a firm surface either level, stepped, or serrated, as shown or as directed. Loose disintegrated rock and thin strata shall be removed. Removal of unstable material shall be as specified above. When concrete or masonry is to be placed in an excavated area, special care shall be taken not to disturb the bottom of the excavation. Excavation to the final grade level shall not be made until just before the concrete or masonry is to be placed.

3.2.6 Underground Utilities

Movement of construction machinery and equipment over pipes and utilities during construction shall be at the Contractor's risk. Perform work adjacent to utilities as indicated in accordance with procedures outlined by utility company. Excavation made with power-driven equipment is not permitted within two feet of known utility or subsurface construction. For work immediately adjacent to or for excavations exposing a utility or other buried obstruction, excavate by hand. Start hand excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work affected by the contract excavation until approval for backfill is granted by the Owner. Report damage to utility lines or subsurface construction immediately to the Owner.

3.2.7 Structural Excavation

Ensure that footing subgrades have been inspected and approved by the Owner prior to concrete placement.

3.5 GROUND SURFACE PREPARATION

3.5.1 General Requirements

Remove and replace unsatisfactory material with satisfactory materials, as directed by the Owner, in surfaces to receive fill or in excavated areas. Scarify the surface to a depth of 6 inches before the fill is started. Plow, step, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so that the fill material will bond with the existing material. When subgrades are less than the specified density, break up the ground surface to a minimum depth of 6 inches, pulverizing, and compacting to the specified density. When the subgrade is part of fill and part of excavation or natural ground, scarify the excavated or natural ground portion to a depth of 12 inches and compact it as specified for adjacent fill.

3.6 UTILIZATION OF EXCAVATED MATERIALS

Unsatisfactory materials removed from excavations shall be disposed of in designated waste disposal or spoil areas. Satisfactory material removed from excavations shall be used, insofar as practicable, in the construction of fills, embankments, subgrades, shoulders, bedding (as backfill), and for similar purposes. No satisfactory excavated material shall be wasted without specific written authorization. Satisfactory material authorized to be wasted shall be disposed of. No excavated material shall be disposed of to obstruct the flow of any stream, endanger a partly finished structure, impair the efficiency or appearance of any structure, or be detrimental to the completed work in any way.

3.8 BACKFILLING AND COMPACTION

Backfill adjacent to any and all types of structures shall be placed and compacted to at least 90 percent laboratory maximum density for cohesive materials or 95 percent laboratory maximum density for cohesionless materials, to prevent wedging action or eccentric loading upon or against the structure. Ground surface on which backfill is to be placed shall be prepared as specified in paragraph GROUND SURFACE PREPARATION. Compaction requirements for backfill materials shall also conform to the applicable portions of paragraphs GROUND SURFACE PREPARATION. Compaction shall be accomplished by sheepsfoot rollers, pneumatic-tired rollers, steel-wheeled rollers, vibratory compactors, or other approved equipment.

3.8.1 Trench Backfill

Trenches shall be backfilled to match existing or proposed grades.

3.8.1.1 Replacement of Unyielding Material

Unyielding material removed from the bottom of the trench shall be replaced with select granular material or initial backfill material.

3.8.1.2 Replacement of Unstable Material

Unstable material removed from the bottom of the trench or excavation shall be replaced with select granular material placed in layers not exceeding 6 inches loose thickness.

3.8.1.3 Bedding and Initial Backfill

Bedding shall be of the type and thickness shown. Initial backfill material shall be placed and compacted with approved tampers to a height of at least one foot above the utility pipe or conduit. The backfill shall be brought up evenly on both sides of the pipe for the full length of the pipe. Care shall be taken to ensure thorough compaction of the fill under the haunches of the pipe. Except as specified otherwise in the individual piping section, provide bedding for buried piping in accordance with AWWA C600, Type 4, except as specified herein. Backfill to top of pipe shall be compacted to 95 percent of ASTM D 698 maximum density. Plastic piping shall have bedding to spring line of pipe. Provide materials as follows:

- a. Class I: Angular, 0.25 to 1.5 inches, graded stone, including a number of fill materials that have regional significance such as coral, slag, cinders, crushed stone, and crushed shells.
- b. Class II: Coarse sands and gravels with maximum particle size of 1.5 inches, including various graded sands and gravels containing small percentages of fines, generally granular and noncohesive, either wet or dry. Soil Types GW, GP, SW, and SP are included in this class as specified in ASTM D 2487.

3.8.1.4 Final Backfill

The remainder of the trench, except for special materials for roadways, shall be filled with satisfactory material. Backfill material shall be placed and compacted as follows:

- a. Roadways: Backfill shall be placed up to the required elevation as specified. Water flooding or jetting methods of compaction will not be permitted. Compact soils to 95 percent maximum density.
- b. Sidewalks, Turfed or Seeded Areas and Miscellaneous Areas: Backfill shall be deposited in layers of a maximum of 12 inch loose thickness, and compacted to 85 percent maximum density for cohesive soils and 90 percent maximum density for cohesionless soils. This requirement shall also apply to all other areas not specifically designated above.

3.8.2 Backfill for Appurtenances

After the manhole, catchbasin, inlet, or similar structure has been constructed, backfill shall be placed in such a manner that the structure will not be damaged by the shock of falling earth. The backfill material shall be deposited and compacted as specified for final backfill, and shall be brought up evenly on all sides of the structure to prevent eccentric loading and excessive stress.

3.9 SPECIAL REQUIREMENTS

All excavation shall be filled by the end of each day except excavation for the dry infiltration basins and roadside infiltration trenches. Special requirements for both excavation and backfill relating to the specific utilities are as follows:

3.9.3 Rip-Rap Construction

Construct rip-rap on bedding material and on filter fabric in accordance with NCDOT Specifications in the areas indicated. Trim and dress indicated areas to conform to cross sections, lines and grades shown within a tolerance of 0.1 foot.

3.12 FINISHING

The surface of excavations, embankments, and subgrades shall be finished to a smooth and compact surface in accordance with the lines, grades, and cross sections, or elevations shown. The degree of finish for graded areas shall be within 0.1 foot of the grades and elevations indicated except that the degree of finish for subgrades shall be specified in paragraph SUBGRADE PREPARATION. Ditches shall be finished in a manner that will result in effective drainage. The surface of areas to be turfed shall be finished to a smoothness suitable for the application of turfing materials. Settlement or washing that occurs in graded, topsoiled, or backfilled areas prior to acceptance of the work, shall be repaired and grades re-established to the required elevations and slopes.

3.13 PLACING TOPSOIL

On areas to receive topsoil, the compacted subgrade soil shall be scarified to a 2 inch depth for bonding of topsoil with subsoil. Topsoil then shall be spread evenly to a thickness of 3 inches and graded to the elevations and slopes shown. Topsoil shall not be spread when frozen or excessively wet or dry. Material required for topsoil in excess of that produced by excavation within the grading limits shall be obtained from offsite areas.

3.15 DISPOSITION OF SURPLUS MATERIAL

Surplus material or other soil material not required or suitable for filling or backfilling, and brush, refuse, stumps, roots, and timber shall be removed from the project site as directed by the Owner.

End of Section

TECHNICAL SPECIFICATIONS

DIVISION 02921 – SEEDING

SECTION 02921

SEEDING

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 602	(2007) Agricultural Liming Materials
ASTM D 4972	(2001; R 2007) pH of Soils
ASTM D 5268	(2007) Standard Specification for Topsoil Used for Landscaping Purposes
ASTM D 5883	(1996e1; R 2008) Use of Rotary Kiln Produced Expanded Shale, Clay or Slate (ESCS) as a Mineral Amendment in Topsoil Used for Landscaping and Related Purposes

U.S. DEPARTMENT OF AGRICULTURE (USDA)

AMS Seed Act	(1998) Federal Seed Act
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1.2 SOURCE INSPECTION

The source of delivered topsoil shall be subject to inspection.

1.3 DELIVERY, INSPECTION, STORAGE, AND HANDLING

1.3.1 Delivery

A delivery schedule shall be provided at least 10 calendar days prior to the first day of delivery.

1.3.1.1 Delivered Topsoil

Prior to the delivery of any topsoil, its availability shall be verified in paragraph TOPSOIL. A soil test shall be provided for topsoil delivered to the site.

1.3.1.2 Soil Amendments

Soil amendments shall be delivered to the site in the original, unopened containers bearing the manufacturer's chemical analysis. In lieu of containers, soil amendments may be furnished in bulk. A chemical analysis shall be provided for bulk deliveries.

1.3.1.3 Pesticides

Pesticide material shall be delivered to the site in the original, unopened containers bearing legible labels indicating the EPA registration number and the manufacturer's registered uses.

1.3.2 Inspection

Seed shall be inspected upon arrival at the job site for conformity to species and quality. Seed that is wet, moldy, or bears a test date five months or older, shall be rejected. Other materials shall be inspected for compliance with specified requirements. The following shall be rejected: open soil amendment containers or wet soil amendments; topsoil that contains slag, cinders, stones, lumps of soil, sticks, roots, trash or other material over a minimum 1-1/2 inch diameter; and topsoil that contains viable plants and plant parts. Unacceptable materials shall be removed from the job site.

1.3.3 Storage

Materials shall be stored in designated areas. Seed, lime, and fertilizer shall be stored in cool, dry locations away from contaminants. Chemical treatment material shall be stored according to manufacturer's instructions and not with seeding operation materials.

1.3.4 Handling

Except for bulk deliveries, materials shall not be dropped or dumped from vehicles.

1.3.5 Time Limitation

Hydroseeding time limitation for holding seed in the slurry shall be a maximum 24 hours.

PART 2 PRODUCTS

2.1 SEED (Note: This specification does not apply to hydroseed applications, which are in section 2.8)

2.1.1 Seed Classification

State-certified seed of the latest season's crop shall be provided in original sealed packages bearing the producer's guaranteed analysis for percentages of mixture, purity, germination, hard

seed, weed seed content, and inert material. Labels shall be in conformance with AMS Seed Act and applicable state seed laws.

2.1.2 Permanent Seed Species and Mixtures

Permanent seed species shall meet the following specifications:

- 97-98% Pure seed (match the surrounding lawns)
- 85% Germination rate
- 1.0 – 2.0 % Other crop seed
- 0.5 – 1.0 Inert matter
- 0.25 – 0.5 % Weed seed

2.1.3 Erosion Control Seed Mixes

- Not Used

2.1.4 Quality

Weed seed shall be a maximum 2 percent by weight of the total mixture.

2.1.5 Seed Mixing

The mixing of seed may be done by the seed supplier prior to delivery, or on site as directed.

2.1.6 Substitutions

Substitutions will not be allowed without written request and approval from the Owner.

2.2 TOPSOIL

Topsoil shall be as defined in ASTM D 5268. When available, the topsoil shall be the existing surface soil stripped and stockpiled onsite in accordance with Section 02300, "EARTHWORK." When additional topsoil is required beyond the available topsoil from the stripping operation, topsoil shall be delivered and amended as recommended by the soil test for the seed specified. Topsoil shall be free from slag, cinders, stones, lumps of soil, sticks, roots, trash or other material over a minimum 1-1/2 inch diameter. Topsoil shall be free from viable plants and plant parts.

2.3 SOIL AMENDMENTS

Not Used

2.4 MULCH

Do Not Mulch.

2.4.1 Straw

Do Not Straw.

2.4.2 Hay

Do Not Hay.

2.5 WATER

Do Not Water.

2.6 PESTICIDE

Do Not use Pesticide.

2.7 SURFACE EROSION CONTROL MATERIAL

Surface erosion control material shall conform to the following:

2.7.1 Surface Erosion Control Blanket

Blanket shall be machine produced mat of wood excelsior formed from a web of interlocking wood fibers; covered on one side with either knitted straw blanket-like mat construction; covered with biodegradable plastic mesh; or interwoven biodegradable thread, plastic netting, or twisted kraft paper cord netting.

2.7.2 Erosion Control Material Anchors

Erosion control anchors shall be as recommended by the manufacturer.

PART 3 EXECUTION

3.1 INSTALLING SEED TIME AND CONDITIONS

Seed on a freshly prepared seedbed and cover seed lightly with seeding equipment or cultipacker after seeding that is recommended by manufacturer.

3.1.1 Seeding Time

Seed at completion of project.

3.1.2 Seeding Conditions

Seeding operations shall be performed only during periods when beneficial results can be obtained. When drought, excessive moisture, or other unsatisfactory conditions prevail, the work shall be stopped when directed. When special conditions warrant a variance to the seeding operations, proposed alternate times shall be submitted for approval.

3.1.3 Equipment Calibration

Immediately prior to the commencement of seeding operations, calibration tests shall be conducted on the equipment to be used. These tests shall confirm that the equipment is operating within the manufacturer's specifications and will meet the specified criteria. The equipment shall be calibrated a minimum of once every day during the operation. The calibration test results shall be provided within 1 week of testing.

3.1.4 Soil Test

Delivered topsoil, existing soil in smooth graded areas, and stockpiled topsoil shall be tested in accordance with ASTM D 5268 and ASTM D 4972 for determining the particle size, pH, organic matter content, textural class, chemical analysis, soluble salts analysis, and mechanical analysis. Sample collection on site shall be random over the entire site. Sample collection for stockpiled topsoil shall be at different levels in the stockpile. The soil shall be free from debris, noxious weeds, toxic substances, or other materials harmful to plant growth. The test shall determine the quantities and type of soil amendments required to meet local growing conditions for the seed species specified.

3.2 SITE PREPARATION

3.2.1 Finished Grade and Topsoil

The Contractor shall verify that finished grades are as indicated on drawings, and the placing of topsoil, smooth grading, and compaction requirements have been completed in accordance with Section 02300 "EARTHWORK", prior to the commencement of the seeding operation.

3.2.2 Application of Fertilizer

The fertilizer shall be applied as recommended by the soil test. Fertilizer shall be incorporated into the soil to a maximum 4-inch depth or may be incorporated as part of the tillage or hydroseeding operation.

3.2.3 Tillage

- Not Used

3.2.4 Prepared Surface

3.2.4.1 Preparation

The prepared surface shall be a maximum 1 inch below the adjoining grade of any surfaced area. New surfaces shall be blended to existing areas. The prepared surface shall be completed with a light raking to remove debris.

3.2.4.2 Lawn Area Debris

Debris and stones over a minimum 5/8 inch in any dimension shall be removed from the surface.

3.2.4.3 Protection

Areas with the prepared surface shall be protected from compaction or damage by vehicular or pedestrian traffic and surface erosion.

3.3 INSTALLATION

Prior to installing seed, any previously prepared surface compacted or damaged shall be reworked. Seeding operations shall not take place when the wind velocity will prevent uniform seed distribution.

3.3.1 Installing Seed

Seeding method shall be Broadcast Seeding. Seeding procedure shall ensure even coverage. Gravity feed applicators, which drop seed directly from a hopper onto the prepared soil, shall not be used because of the difficulty in achieving even coverage, unless otherwise approved. Absorbent polymer powder shall be mixed with the dry seed at the rate recommended by the manufacturer.

3.3.1.1 Broadcast Seeding

Seed shall be uniformly broadcast using broadcast seeders. Half the total rate of seed application shall be broadcast in 1 direction, with the remainder of the seed rate broadcast at 90 degrees from the first direction. Seed shall be covered a maximum 1/4 inch depth by disk harrow, steel mat drag, cultipacker, or other approved device.

3.3.1.2 Rolling

The entire area shall be firmed with a roller not exceeding 90 pounds per foot roller width. Slopes over a maximum 3-horizontal-to-1 vertical shall not be rolled. Areas seeded with seed drills equipped with rollers shall not be rolled.

3.3.2 Mulching

Do Not Mulch.

3.3.3 Watering Seed

Watering shall be started immediately after completing the seeding of an area. Water shall be applied to supplement rainfall at a rate sufficient to ensure moist soil conditions to a minimum 1 inch depth. Run-off and puddling shall be prevented. Watering trucks shall not be driven over turf areas, unless otherwise directed. Watering of other adjacent areas or plant material shall be prevented.

3.4 SURFACE EROSION CONTROL

3.4.1 Surface Erosion Control Material

Where indicated or as directed, surface erosion control material shall be installed in accordance with manufacturer's instructions. Placement of the material shall be accomplished without damage to installed material or without deviation to finished grade.

3.4.2 Temporary Seeding

When directed during contract delays affecting the seeding operation or when a quick cover is required to prevent surface erosion, the areas designated shall be seeded in accordance with temporary seed species listed under Paragraph SEED.

3.5 QUANTITY CHECK

For materials provided in bags, the empty bags shall be retained for recording the amount used. For materials provided in bulk, the weight certificates shall be retained as a record of the amount used. The amount of material used shall be compared with the total area covered to determine the rate of application used. Differences between the quantity applied and the quantity specified shall be adjusted as directed.

3.6 APPLICATION OF PESTICIDE

- Not Used

3.7 RESTORATION AND CLEAN UP

3.7.1 Restoration

Existing turf areas, pavements, and facilities that have been damaged from the seeding operation shall be restored to original condition at Contractor's expense.

3.7.2 Clean Up

Excess and waste material shall be removed from the seeded areas and shall be disposed offsite. Adjacent paved areas shall be cleaned.

3.8 PROTECTION OF INSTALLED AREAS

Immediately upon completion of the seeding operation in an area, the area shall be protected against traffic or other use by erecting barricades and providing signage as required, or as directed.

3.9 SEED ESTABLISHMENT PERIOD

3.9.1 Commencement

The seed establishment period to obtain a healthy stand of grass plants shall begin on the first day of seeding work under this contract and shall continue through the remaining life of the contract. The seed establishment period shall be modified for inclement weather, shut down periods, or for separate completion dates of areas.

3.9.2 Satisfactory Stand of Grass Plants

Grass plants shall be evaluated for species and health when the grass plants are a minimum 1 inch high.

3.9.2.1 Lawn Area

A satisfactory stand of grass plants from the seeding operation for a lawn area shall be a minimum 100 grass plants per square foot. Bare spots shall be a maximum 6 inches square. The total bare spots shall be a maximum 2 percent of the total seeded area.

3.9.3 Maintenance During Establishment Period

Maintenance of the seeded areas shall include eradicating weeds, insects and diseases; protecting embankments and ditches from surface erosion; maintaining erosion control materials and mulch; protecting installed areas from traffic; mowing; watering; and post-fertilization.

3.9.3.1 Mowing

- Not Used

3.9.3.2 Post-Fertilization

- Not Used

3.9.3.3 Pesticide Treatment

- Not Used

3.9.3.4 Repair or Reinstall

Emerald Subdivision Pond Outlet Structure Replacement / Improvement

- Not Used

End of Section

TECHNICAL SPECIFICATIONS

DIVISION 03334 – STORM UTILITY DRAINAGE PIPING

SECTION 03334

STORM UTILITY DRAINAGE PIPING

PART 1 GENERAL

1.1. SUMMARY

- A. Provide all labor, materials, and equipment as necessary to complete all work as indicated on the Drawings and specified herein.

1.2. DEFINITIONS

- A. HDPE: High Density Polyethylene

1.3. PERFORMANCE REQUIREMENTS – GRAVITY-FLOW, NON-PRESSURE, DRAINAGE PIPING PRESSURE RATINGS:

- A. At least equal to system test pressure

1.4. REFERENCES

- A. AASHTO M 294

1.5. SUBMITTALS

- A. Before commencing work, the Contractor shall provide an affidavit from the material manufacturers, that their materials meet the Specifications.

PART 2 PRODUCTS

2.1 PIPES AND FITTINGS:

- A. Corrugated HDPE Drainage Tubing and Fittings: AASHTO M 252, Type S, with smooth waterway for coupling joints.
 - 1. Soiltight Couplings: AASHTO M 252, corrugated, matching tube and fittings to form soiltight joints.

- B. Corrugated HDPE Pipe and Fittings: AASHTO M 294, Type S, with smooth waterway for coupling
 - 1. Soiltight Couplings: AASHTO M 294, corrugated, matching pipe and fittings to form soiltight joints.
 - 2. Silttight Couplings: PE sleeve with ASTM D 1056, Type 2, Class A, Grade 2 gasket material that mates with pipe and fittings to form silttight joints.

PART 3 EXECUTION

3.1 TESTING AND INSPECTION

A. Inspections

- 1. Contractor shall inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.
 - a. Defects requiring correction include the following:
 - 1) Alignment: Less than full diameter of inside of pipe is visible between structures.
 - 2) Deflection: Flexible piping with deflection that prevents passage of ball or cylinder of size not less than 92.5 percent of piping diameter.
 - 3) Crushed, broken, cracked, or otherwise damaged piping.
 - 4) Infiltration: Water leakage into piping.
 - 5) Exfiltration: Water leakage from or around piping.
 - b. Contractor shall replace defective piping using new materials, and repeat inspections until defects are within allowances specified.
 - c. Contractor shall reinspect and repeat procedure until results are satisfactory.
- 2. Performance Requirements:
 - a. Inspection procedures and equipment shall meet the applicable standards as presented in the National Association of Sewer Service Companies (NASSCO) Recommended Specifications for Sewer Collection System Rehabilitation.

End of Section