INVITATION TO BID

ITB 2025-01-002

Clemson Park Phase 1



Page 1 of 132



City of Clemson

INVITATION TO BID

ITB 2025-01-002

CLEMSON PARK PHASE 1

ISSUE DATE

CLOSING DATE & TIME

January 17, 2025

February 7, 2025 at 2:00 PM

Clemson City Hall Engineering Conference Room 1250 Tiger Blvd, Suite 5 Clemson, South Carolina 29631

SOLICITATION NUMBER

ACCEPTANCE PLACE/AGENCY

QUESTIONS & RESPONSES

2025-01-02

City of Clemson Finance Department Procurement Coordinator 1250 Tiger Blvd, Suite 2 Clemson, South Carolina 29631

*BID SUBMISSIONS THAT ARE HAND DELIVERED MUST BE RECEIVED AND INITIALED BY THE FINANCE DEPARTMENT.

Questions regarding this solicitation shall be received in writing via email no later than **5:00 PM on January 31**, **2025**.

Responses will be provided via addenda no later than **5:00 PM on February 3, 2025.**

CONTACT

Brandon Burton, Procurement Coordinator

bburton@cityofclemson.org

Documents can be downloaded from our website: clemsoncity.org



Clemson City Hall 1250 Tiger Blvd, Suite 2 Clemson, South Carolina 29631

Invitation to Bid ITB 2025-01-002 Clemson Park Phase 1 Issue Date: January 17, 2025

The City of Clemson is seeking the service of a firm to install approximately 250 LF of storm drainage pipe with associated box, an underground detention system and grading preparation for a skate park. Please see Section III of the solicitation documents for full scope of work. Time is of the essence for this project. Coordination is required with a pre-selected specialty work contractor.

Sealed responses will be accepted by the Clemson Finance Department located at Clemson City Hall until **2:00 PM February 7, 2025.** Submissions that are hand delivered <u>must</u> be received and initialed by the Finance Department. Submissions that are mailed in should be sent to City of Clemson Finance Department 1250 Tiger Blvd, Suite 2. At the time and date above, sealed responses will be publicly opened and the names read aloud at the City of Clemson conference room located at 1250 Tiger Blvd Suite 5, Clemson SC 29631. Submissions received after this time will not be accepted.

Each sealed envelope must be marked on the outside as "Clemson Park Phase 1 ITB 2025-01-002" and should include the respondent's name and address.

Questions regarding this solicitation should be directed to Mr. Brandon Burton, Procurement Coordinator via email at <u>bburton@cityofclemson.org</u> and shall be received no later than **5:00 PM, January 31, 2025.**

There will be one opportunity for a non-mandatory pre-bid meeting for this project. Location will be

114 Clemson Park Rd., Clemson SC 29631

Tuesday, January 28, 2025 at 10:30 AM

Contract documents, including drawings and technical specifications are on file at City of Clemson City Hall, 1250 Tiger Blvd, Clemson SC 29631. Copies of the documents may be obtained at <u>www.clemsoncity.org</u>. Documents are available in electronic PDF format free of charge.

The City of Clemson reserves the right to cancel this solicitation and/or reject any and all bids in whole or in part if the City of Clemson determines that cancellation and/or rejections are advantageous to the City. Bids are legal and binding upon the Respondent when submitted. It will also be the responsibility of each respondent to obtain any addenda issued from the Procurement Office. The written solicitation documents supersede any verbal or written prior communications between the parties.

David A. Blondeau, City Administrator City of Clemson

SECTION I- GENERAL INSTRUCTIONS

ITB 2025-01-002

Clemson Park Phase 1



CITY OF CLEMSON, SOUTH CAROLINA GENERAL INFORMATION

GENERAL INFORMATION

The City of Clemson is seeking the service of a firm to install approximately 250 LF of storm drainage pipe with associated box, an underground detention system and grading preparation for a skate park. Please see Section III of the solicitation documents for full scope of work. Time is of the essence for this project. Coordination is required with a pre-selected specialty work contractor.

EXAMINATION OF BID DOCUMENTS AND SITE

Before submitting an offer, each offeror shall: examine the solicitation document package thoroughly; become familiar with local conditions affecting cost and work progress or performance; become familiar with federal, state, and local laws, ordinances, rules, regulations affecting cost and work progress or performance; study and carefully correlate offeror's observations with the solicitation document package; and notify the city concerning conflicts, errors, or discrepancies in the solicitation document package.

Offer submission will constitute indisputable representation that offeror understands and has complied with requirements contained in this article, and that offeror has read and understood the solicitation document package and hereby stipulates that the documents are sufficient in scope and detail to indicate and convey understanding for terms and conditions in order to perform work.

SOLICITATION DOCUMENTS

The solicitation document package includes the Advertisement, Sections I-IV, all attachments, exhibits, and addenda issued during the solicitation period.

Complete sets of the solicitation document package shall be used in preparing offers. The city assumes no responsibility for errors or misinterpretations resulting from using incomplete sets of the solicitation document package.

The city, in making the solicitation document package available on the above terms, does so only to obtain bids on work and does not confer license or grant for any other use.

Any part of the solicitation document package may be modified by addenda. See Section II for more detailed terms.

CONTACT PERSON

Respondents are encouraged to contact Brandon Burton, Procurement Coordinator by email at <u>bburton@cityofclemson.org</u> to clarify any part of these requirements. All questions that arise prior to the DEADLINE FOR QUESTIONS due date shall be directed to the contact person in writing via email. Any unauthorized contact shall not be used as a basis for responding to this solicitation and also may result in the disqualification of the contractor's submittal.

Contractors may not contact any elected official or other city employee to discuss the procurement process or bid opportunities except through the procurement coordinator named herein or as provided by existing work agreement(s). This policy shall be strictly enforced and the city reserves the right to reject the submittal of any vendor violating this provision.

SUBMISSIONS

One (1) unbound, printed and signed original and supporting documents must be submitted in response to the solicitation and must be received no later than **2:00 PM on February 7, 2025.** Bids must be submitted in a sealed envelope with the following clearly labeled on the outside **"Clemson Park Phase 1 ITB 2025-01-002"** and should include the respondent's name and address. Each envelope should be addressed to:

City of Clemson Finance Department Procurement Coordinator 1250 Tiger Blvd, Suite 2 Clemson, SC 29631

Hard copies may be delivered to the above address ONLY between the hours of 8:00 AM and 5:00 PM EST, Monday through Friday, excluding holidays observed by the City of Clemson Government. Bid must meet required specifications and must be of a quality that will adequately serve the use and purpose for which intended.

Submittals or modifications received after the due date and time will not be considered. City of Clemson Government assumes no responsibility for the premature opening of submittals not properly addressed and identified and/or delivered to the proper designation. Late submittals properly addressed to the City of Clemson shall be returned to the respondent unopened.

Each offeror shall complete and return forms found in Section III and IV with their offer. Each solicitation shall contain the following completed forms and documents.

- a. Bidders Checklist
- b. Bidders Declaration
- c. Bid Form
- d. Bid Bond
- e. SC Immigration Form
- f. Certificate of Non-Discrimination
- g. Non-Collusion Affidavit
- h. SC Ethics in Public Contracting Affidavit
- i. W9
- j. SC I-312
- k. Addenda Acknowledgement Form (if applicable)

More than one response received for the same work from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. Reasonable grounds for believing any applicant is interested in more than one bid for the same work will cause the city to reject all bids from the applicant. If the city believes collusion exists among applicants, bids from participants in collusion will not be considered.

Conditions, limitations, or provisions attached by the applicant to the bid forms may cause its rejection. Bids containing items not included in the form of bids will be considered irregular. Any offer submitted as a result of this solicitation shall be binding on the offeror for ONE HUNDRED TWENTY (120) CALENDAR DAYS FOLLOWING THE SPECIFIED OPENING DATE. Any proposal for which the offeror specifies a shorter acceptance period may be rejected.

MODIFICATION AND WITHDRAWAL OF BIDS

Withdrawal prior to time for receiving bids: Bids may be modified or withdrawn by appropriate document duly executed and delivered to the place where bids are to be submitted at any time prior to the deadline for submitting bids. Bid withdrawals will not prejudice applicant's rights to submit a new bid prior to the deadline for submitting bids.

Withdrawal after the time for receiving bids: After the period for receiving bids has expired, no bid may be withdrawn, modified, or explained, except as provided for in the below article.

AWARD OF CONTRACT

To extent permitted by applicable state and federal laws and regulations, the city reserves the right to reject any and all bids, to waive any and all informalities, and to disregard nonconforming, non-responsive, or conditional bids. Bids may be considered irregular and subject to rejection if they show serious omission, unauthorized form alterations, use of unauthorized forms, unauthorized alternate bids, incomplete or unbalanced unit prices, or other irregularities. In case of error in the extension of prices in the bid, the unit price will govern. No bid shall be altered, amended, or withdrawn, unless the acceptance date has expired, after the opening date of bids. Negligence on the part of the contractor in preparing the bid confers no right for the withdrawal of the bid after it has been opened. Any mistake, which is obviously a clerical one, such as an error in price extension, or in placement of decimal points, reversal of prices, FOB destination, FOB point of origin, etc., may be corrected by the City of Clemson after verification is made by the applicant. However, under no circumstances can unit prices be changed.

Contract will be awarded by the city pursuant to applicable law. Nothing contained herein shall place duty upon the city to reject bids or award bids based upon anything other than the city's sole discretion as described herein. The city will award the project at the city's discretion.

Definitions

The words "Bidder", "Offeror", "Proposer", "Respondent", "Vendor", and "Contractor" are used interchangeably throughout this solicitation, and are used in place of the person, firm, or corporation submitting a proposal/response/offer/bid.

End of Section I

SECTION II- GENERAL TERMS & CONDITIONS

ITB 2025-01-002

Clemson Park Phase 1



Page 8 of 132

CITY OF CLEMSON, SOUTH CAROLINA GENERAL TERMS & CONDITIONS FOR SOLICITATIONS

RIGHTS RESERVED BY CITY

The City reserves the right to reject any or all proposals/bids; to waive any informality or irregularity not affected by law; to evaluate, in its absolute discretion, the proposals submitted; and to award the contract based on the established criteria and according to the proposal which best serves the interest of the City. Further, the City of Clemson may make any investigations deemed necessary to determine bidder's ability to perform the work, and bidder shall furnish all information and data requested by the city. The city reserves the right to reject any bid from any bidder that the city considers not properly qualified to carry out agreement obligations or able to satisfactorily complete the work on schedule.

INTERPRETATION AND ADDENDA

From time to time, the City may have to release written changes to a solicitation due to an inadvertent error or omission on the part of the City or to an inquiry from an interested vendor during the question phase of the solicitation. No verbal interpretation made to any respondent as to the meaning of this solicitation shall be binding on the City. Offerors are cautioned that any statements made by the City staff that materially changes any portion of this solicitation shall not be relied upon unless they are subsequently ratified in writing and distributed as an addendum by the City. It shall be the offeror's responsibility to acknowledge receipt of addenda and ascertain that its proposal includes all addenda. Failure to do so may deem an offeror's proposal non-responsive.

No changes to the published terms and conditions, scope of work, minimum requirements, or insurance and bonding requirements will be considered unless they are submitted in compliance with the deadline for the questions or clarification phase of the solicitation. Any changes to the published terms and conditions, scope of work, minimum requirements, or insurance and bonding requirements will be published in a formal, written addendum. The City is not obligated to make any changes to the published solicitation based on an inquiry from a vendor. The City will not consider "red-line" amendments to any contract with the successful bidder, as all requests for changes must be posed in the question phase and accepted in a formal addendum. If the offeror discovers any ambiguity, conflict, discrepancy, omission or other errors in the solicitation, offeror shall immediately notify the City of such error in writing and request modification or clarification of the document. The offeror is responsible for clarifying any ambiguity, conflict, discrepancy, omission, or other error in the solicitation, or it shall be deemed waived. Where there appears to be a conflict between the solicitation and any addenda issued, the last addendum issued will prevail. Contractors are advised to check the website for addenda before submitting their bids.

ACCEPTANCE OF CONTENT

Before submitting an offer, each offeror shall make all investigations and examinations necessary to ascertain all site conditions and requirements affecting the performance of the contract and to verify any representations made by the City upon which the proposal will rely. If the offeror receives an award as a result of its proposal, failure to have made such investigations and examinations will in no way relieve the offeror from its obligation to comply in every detail with all provisions and requirements of the contract documents, nor will a plea of ignorance of such conditions and requirements be accepted as a basis for any claim whatsoever by the contractor for additional compensation.

ALTERATIONS OF SOLICITATION AND ASSOCIATED DOCUMENTS

Alterations of city documents are strictly prohibited and will result in automatic disqualification of the bidder's solicitation response. If there are "exceptions" or comments to any of the solicitation requirements or other language, then the supplier may make notes to those areas, but may not materially alter any document language.

SIGNATURE (BIDDERS DECLARATION) FORM

Offers shall include a signed Signature Form. Offers that do not include a signed Signature Form will not be accepted as complete and shall not be considered. The Signature Form must be signed in ink (not typed) in the appropriate space(s) by an authorized officer or employee of the offeror.

NONRESIDENT TAXPAYER REGISTRATION AFFIDAVIT

Non-resident companies receiving income from business conducted in the State of South Carolina are required to pay taxes to the State of South Carolina on that income. To facilitate this requirement, a nonresident offeror must register with the South Carolina Secretary of State or the South Carolina Department of Revenue. In compliance with Sections 12-8-540 and 12-8-550 of the South Carolina Code of Laws, an offeror located outside of the State of South Carolina that receives a contract from the City must furnish to the City Form I-312, <u>Nonresident Taxpayer Registration Affidavit Income Tax Withholding</u>, properly executed and signed. If an offeror is not presently registered with the appropriate state office, it may indicate the intent to do so should it be awarded a contract. Questions concerning this form may be directed to the South Carolina Department of Revenue at (844) 898-8542.

DETERMINATION OF RESPONSIBILITY

City may make such investigation as it deems necessary to determine the ability of an offeror to furnish the required services, and the offeror shall furnish to the City all such information and data for this purpose as the City may request. City reserves the right to reject any proposal if the evidence submitted or investigation of such offeror fails to satisfy the City that offeror is properly qualified to carry out the obligations of a contract and to deliver the services contemplated therein. Offerors will fully inform themselves as to the conditions, requirements, and scope of work before submitting their offer. Failure to do so will be at the offeror's own risk.

QUALIFICATIONS-BASED SOLICITATION

Negotiations shall be conducted beginning with the offeror whose qualifications are deemed to rank highest among all offers received in response to this solicitation. If a contract satisfactory and advantageous to the City can be negotiated at a price considered fair and reasonable, the award shall be made to that offeror. Otherwise, negotiations with the offeror ranked first shall be formally terminated and negotiations with the offeror ranked second shall be conducted.

CONTRACT AND CONTRACT DOCUMENTS

Following the award to the successful offeror (the "Contractor"), the Contractor and the City shall execute the Standard Contract Form, a copy of which is attached hereto for reference. The Standard Contract Form, together with the attachments listed therein, will constitute the "Contract" between the Contractor and the City.

REQUIREMENTS OF THE CONTRACTOR

The Contractor shall (i) have the professional qualifications, experience, expertise, and personnel to timely perform the Project, (ii) have the requisite licenses, certifications, and permits from all public

entities having jurisdiction over Contractor or the Project and shall maintain such licenses, certifications, and permits during the term of the Project, (iii) become familiar with the Project site and the local conditions under the Project is to be performed, (iv) comply with all instructions and shall perform services in a manner commensurate with the highest professional standards by qualified and experienced personnel performing the same or similar services in the same or similar location, and (v) assume full responsibility to City for the improper acts and omissions of its contractors, consultants, or others, if any, employed or retained by Contractor in connection with the Project.

RESPONSIBILITY OF THE CITY

Among other things, the City will provide Contractor access to all information in City's possession that City reasonably determines is necessary for Contractor to perform the Project. The project manager will coordinate with Contractor, and facilitate coordination with other City personnel, as reasonably necessary to allow Contractor to adequately perform the Project.

PAYMENT TERMS

Unless otherwise agreed by the City and the Contractor, Contractor shall submit monthly invoices to the City for the work performed under the Contract by the 10th day of the month following the month in which such work is performed. Such invoices shall reference this Contract by number and shall be accompanied by any reasonably required supporting materials, documentation, or data, including a monthly progress report, if applicable. The City shall pay Contractor for such invoice within 30 days of receipt, provided the same has been reviewed and approved by the project manager, which review shall occur within five (5) business days of receipt. Should the project manager approve payment in an amount less than that submitted by the Contractor in the invoice, then the unpaid portion of such invoice shall be retained until approved, and the City and the Contractor shall work together in good faith to resolve such discrepancy. Upon receipt of payment from the City, the Contractor shall immediately pay all sub-contractors, sub-consultants, materialmen, suppliers, or laborers, as applicable, the amounts they are due for the work covered by such payment.

CITY OF CLEMSON BUSINESS LICENSES

The Contractor shall secure and pay for any and all licenses, permits, and certificates that may be necessary for proper execution and completion of the contract, and which are legally required when proposals are received, or negotiations concluded.

Specifically, Contractor must obtain all business license(s) required by the Clemson City Code and Ordinances. A City Business License is not required to submit a proposal however, any offeror that receives an award under this RFP shall be required to obtain a City Business License before work can begin. For further information on the provisions of the City Business License Regulations and their applicability to this contract, contact the Clemson City Business License Division at (864) 624-1147 or businesslicense@cityofclemson.org.

Contractor shall inform all of its subcontractors and/or sub-consultants performing services hereunder that a like business license requirement applies to them, and Contractor shall further disclose the names and addresses of all of Contractor's subcontractors performing services hereunder to City's Business License Division at <u>businesslicense@cityofclemson.org</u> or (864) 624-1147.

COMPLIANCE WITH LAWS

<u>General</u>. Contractor, in the performance of work under the Contract, shall fully comply with all applicable federal, state, county, or municipal laws, rules, regulations, ordinances, including, if applicable, the

Americans with Disabilities Act ("ADA") and the regulations promulgated thereunder, including ADA Title II, and shall hold the City harmless from any liability resulting from failure of such compliance.

<u>Equal Employment Opportunity.</u> Contractor and all subcontractors, suppliers, and vendors shall comply with all federal, state, county, or municipal laws, rules, regulations, ordinances, and orders regarding affirmative action to ensure equal employment opportunities and fair employment practices. Failure to file any report due under such orders will result in suspension of periodic progress payments. Contractor shall ensure unlimited access to the Project sites for all equal employment opportunity compliance officers.

<u>Employment Discrimination.</u> Contractor agrees not to discriminate against any employee or applicant for employment because of race, religion, color, sex, gender identity, sexual orientation, age, handicap, or national origin; however, some conditions may be a bona fide occupational qualification reasonably necessary for the normal operations of Contractor. Contractor agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provision of this nondiscrimination clause.

<u>Compliance with the South Carolina Illegal Immigration Reform Act.</u> Each offeror shall certify in writing and include with its proposal that, as to any contract subsequently entered into between the offeror and the City, the offeror will verify the employment status of any new employees and require any subcontractors or sub-subcontractors performing services under such contract to verify their new employees' status, per the terms of the South Carolina Illegal Immigration Reform Act, and as set out in Title 41, Chapter 8 of the South Carolina Code of Laws.

<u>Compliance with Anti-Discrimination Provisions of Section 11-35-5300, Code of Laws of South Carolina, 1976</u>. If the Contract shall have a total potential value of \$10,000.00 or more, and/or unless such goods and/or services are offered to City for at least 20% less than the lowest certifying business, then, by entering into the Contract, Contractor certifies to City that Contractor is not currently engaged in, nor will it engage in, the boycott of a person or entity based in or doing business with World Trade Organization members and/or those with which the United States has free trade or other agreements aimed at ensuring open and nondiscriminatory trade relations, with the understanding that failure to make such affirmative certification shall affect an automatic termination of the Contract.

<u>Ethics in public contracting affidavit.</u> To comply with the provisions of Section 8-13-100 *et seq.* of the South Carolina Code of Laws, each offeror shall certify in writing and include with its proposal that its offer was made without fraud, that it has not offered or received any kickbacks or inducements from any other offeror, supplier, manufacturer, or subcontractor in connection with the offer, and that it has not conferred on any public employee, public member, or public official having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money services, or anything of more than nominal value.

Each offeror shall certify further that no relationship exists between itself and the City, another person, or organization that interferes with fair competition or constitutes a conflict of interest with respect to a contract with the City.

<u>Non Collusion affidavit.</u> As part of its proposal, each offeror shall include the attached non-collusion affidavit, duly signed by a principal of the offeror certifying that it is not a party to any collusive action or any action that may be in violation of the Sherman Antitrust Act. Any or all proposals shall be rejected if

there is any reason for believing that collusion exists among the offerors. The City may or may not, at its discretion, accept future proposals for the same work from participants in such collusion.

INDEMNIFICATION

Contractor shall indemnify, defend, and hold City, and its respective officers, officials, contractors, employees, agents, and representatives (collectively, "Indemnitees"), free and harmless from and against any and all losses, injuries, death, damages, liabilities, claims, deficiencies, demands, actions, suits, judgments, interest, awards, penalties, fines, costs or expenses of any kind or nature, including reasonable attorneys' fees and costs, the costs of enforcing any right to indemnification hereunder, and the costs of pursuing any insurance providers (collectively, "Losses"), arising out of or occurring in connection with (i) any claim for property damage or personal injury, including death, to the extent resulting from or arising out of the negligence or willful misconduct of Contractor, its subcontractors, employees, agents, or representatives under the Agreement, or (ii) any claim that City's or an Indemnitee's use or possession of any goods or use of any services hereunder infringes or misappropriates the patent, copyright, trade secret, or other intellectual property right of any third party. Notwithstanding Contractor's obligation to defend City, at Contractor's sole cost and expense, hereunder, City shall have the option to appear and defend such action or claim on its own behalf. Contractor shall not enter into any settlement without the City's prior written consent. The foregoing indemnity shall survive the expiration or termination of the Contract.

INSURANCE

The Contractor shall procure and maintain insurance for the duration of this Contract against any and all claims for injuries to persons or damages to property which may in any way arise from, or in connection with, the performance of the work hereunder by the Contractor, its subcontractors, employees, agents, or representatives for not less than any limits of liability shown below with a carrier authorized to do business in the State of South Carolina.

All coverage shall be primary and shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability. Original endorsements, signed by a person authorized to bind coverage on its behalf, shall be furnished to the City by the successful offeror.

Certificate of insurance must be presented to the city before a notice to proceed is issued.

<u>Commercial General Liability</u>: Contractor shall maintain insurance for protection against all claims arising from injury to person or persons not in the employ of Contractor and against all claims resulting from damage to any property due to any act or omission of Contractor, its subcontractors, employees, agents, or representatives in the operation of the work or the execution of the Contract.

Contractor shall maintain general liability coverage required for a period of not less than five years after final completion of the Project. General liability coverage must include products or completed operations coverage. Where the work to be performed involves excavation or other underground work or construction, the property damage insurance provided shall cover all claims due to destruction of subsurface property, such as wire, conduits, pipes, etc., caused by Contractor's operation. The minimum shall be as follows:

Bodily Injury (Injury or Accidental Death) and Property Damage \$1,000,000 per occurrence

<u>Comprehensive</u> <u>Automobile</u> <u>Liability</u>: Contractor shall maintain automobile liability insurance for protection against all claims arising from the use of vehicles, rented vehicles, or any other vehicle in the

prosecution of the work included in the Contract. Such insurance shall cover the use of automobiles and trucks on and off the site of the Project. The minimum amounts of automobile liability insurance shall be as follows:

Bodily Injury (Injury or Accidental Death) and Property Damage \$1,000,000 Combined Single Limit

<u>South Carolina Workers' Compensation Insurance</u>: Contractor shall maintain workers' compensation insurance for all of Contractor's employees who are in any way connected with performance under the Contract. Such insurance shall comply with all applicable state laws and provide a waiver of subrogation against City, its officers, officials, employees, agents, and representatives.

| South Carolina Workers' Compensation | Statutory Limits |
|--------------------------------------|---|
| Employers' Liability Insurance | \$500,000 Each Accident \$500,000 Disease Each Employee \$500,000 Disease Policy Limit |

<u>Professional Liability Insurance</u>: If providing a professional service, the Contractor shall maintain professional liability insurance to cover errors or acts of omission by the Contractor, its subcontractors, employees, agents, and representations in the performance of its obligations herein:

Professional Liability

Contractor shall provide the City with a certificate(s) of insurance showing proof of insurance acceptable to the City. Certificates containing wording that releases the insurance company from liability for non-notification of cancellation of the insurance policy are not acceptable. Certificates showing proof of such insurance shall be submitted to the City prior to commencement of services under the Contract by email to bburton@cityofclemson.org_ Further, it shall be an affirmative obligation upon the Contractor to advise City by e-mail to bburton@cityofclemson.org_ within two days of the cancellation or substantive change of any insurance policy set out herein, and failure to do so shall be construed to be a breach of the Contract. The Certificate Holder name and address is to be displayed as follows:

City of Clemson 1250 Tiger Blvd Clemson, SC 29631

The general liability policy is to contain or be endorsed to name the City, its officers, officials, employees, agents, and representatives as additional insured as respects the liability arising out of the activities performed under the Contract. Such coverage shall be primary and shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

Contractor or its insurers are responsible for payment of any liability arising out of workers' compensation, unemployment, or employee benefits offered to its employees. Insurance is to be placed with insurers with a current A.M. Best's rating of not less than A:VII and licensed to do business in the State of South Carolina, unless otherwise acceptable to the City. Contractor shall not self-insure in satisfaction of any insurance requirement hereunder without the express, written approval of City. Contractor shall insure that its subcontractors hereunder comply with the insurance requirements set

\$1,000,000

out herein, and when requested by the City, Contractor shall agree to obtain and furnish copies of certificates of insurance evidencing coverage for each subcontractor.

Should Contractor cease to have insurance as required during any time, all work by Contractor pursuant to the Contract shall cease until insurance acceptable to the City is provided.

<u>Deductibles, Co-Insurance Penalties, & Self-Insured Retention</u>: Contractor shall agree to be fully and solely responsible for any costs or expenses as a result of a coverage deductible, co-insurance penalty, or self-insured retention; including any loss not covered because of the operation of such deductible, co-insurance penalty, or self-insured retention.

TERMINATION OF THE CONTRACT

<u>Termination by City for Convenience</u>. City, in its sole discretion, may terminate this Contract, in whole or in part, at any time without cause by providing at least 30 calendar days' prior written notice to Contractor, specifying the extent to which performance of the work under the Contract is terminated and the date upon which such termination becomes effective. Termination of this Contract shall not relieve either party of any obligation incurred to the other prior to termination, and the City shall pay Contractor for all services rendered and costs reasonably incurred prior to termination.

Termination by City for Cause. In addition to any other rights that City may have hereunder, this Contract may be terminated, in whole or in part, by City on written notice to Contractor, specifying the extent to which performance of the work under the Contract is terminated and the date upon which such termination becomes effective (i) if Contractor materially breaches any provision of this Contract and either the breach cannot be cured or, if the breach can be cured, it is not cured by Contractor within 15 calendar days after Contractor's receipt of written notice of such breach, or (ii) if Contractor (A) becomes insolvent, (B) is generally unable to pay, or fails to pay, its debts as they become due, (C) files, or has filed against it, a petition for voluntary or involuntary bankruptcy or pursuant to any other insolvency law, (D) makes or seeks to make a general assignment for the benefit of its creditors, or (E) applies for, or consents to, the appointment of a trustee, receiver, or custodian for a substantial party of its property or business. Termination of this Contract shall not relieve either party of any obligation incurred to the other prior to termination, and the City shall pay Contractor for all services rendered and costs reasonably incurred prior to termination, provided, however, that should City terminate this Contract for cause as provided hereunder, then City may proceed to have the Project completed by another contractor or consultant, and the Contractor shall be liable to the City for any costs incurred by City that are greater than what City would have paid had the Contractor performed as required by the Contract.

<u>Termination by City for Non-Appropriation</u>. Notwithstanding anything herein to the contrary, the Contract shall be subject to immediate cancellation without damages or further obligation when funds are not appropriated (or are appropriated and subsequently withdrawn) or otherwise made available to support continuation of performance of the Contract in a subsequent fiscal period or appropriated year.

<u>Termination by Contractor</u>. If City repeatedly fails to perform its material obligations to Contractor for a period of 30 calendar days after receiving written notice from Contractor of its intent to terminate hereunder, Contractor may terminate performance under the Contract by written notice to City. In such event, Contractor shall be entitled to recover from City as though City had terminated Contractor's performance for convenience as described above.

MISCELLANEOUS

<u>Independent Contractor</u>. Contractor shall at all times be considered an independent contractor of City hereunder, and neither Contractor nor its subcontractors, employees, agents, or representatives shall, under any circumstances, be considered employees of City. City shall not be legally responsible for negligence or other wrongdoing, either intentional or unintentional, by Contractor or Contractor's subcontractors, employees, agents, or representatives. City shall not deduct from payment to Contractor any federal or state unemployment taxes, federal or state income taxes, social security tax, or other amounts for benefits to Contractor. Further, City shall not provide to Contractor any insurance coverage or other benefits, including workers' compensation coverage, normally provided by City for its employees.

<u>Notices</u>. All notices or other communications required hereunder shall be in writing and shall be deemed given effectively if delivered personally, delivered by an express courier (with confirmation), mailed by certified or registered mail (return receipt requested), sent via facsimile (with confirmation), or delivered by email (with confirmation) to the named party at the address provided or at such other address as may be designated by either party in writing to the other party by like notice.

<u>Entire Agreement</u>. The Contract (including any schedules, exhibits, addenda, or attachments hereto, and the other documents and instruments referred to in the Contract) constitutes the entire agreement between the parties and supersedes all prior agreements and understandings, both written and oral, between the parties with respect to the Project.

<u>Governing Law; Venue.</u> The Contract and the rights, obligations, and remedies of the parties hereto shall in all respects be governed by and construed in accordance with the laws of the State of South Carolina. Venue for the resolution of all disputes regarding the terms of the Contract or the performance thereunder, whether in law or in equity, shall be exclusively in the federal or state courts of Clemson County, South Carolina.

<u>Severability</u>. If any part or provision of the Contract is held invalid or unenforceable under applicable law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining parts of the Contract.

<u>Non-Waiver</u>. Failure by the City or Contractor at any time to enforce the provisions of the Contract shall not be construed as a waiver of any such provisions or any subsequent breach. Such failure to enforce shall not affect the validity of the Contract, or any part thereof, or the right of the City or Contractor to enforce any provision at any time in accordance with its terms.

<u>Assignment</u>. Contractor shall not assign, transfer, convey, or otherwise dispose of any award or any or all of its rights, title, or interest in the Contract, in whole or in part, without the prior written consent of the City.

<u>Successors and Assigns</u>. The rights and obligations of the City and Contractor herein shall inure to, and be binding upon, the respective successors and permitted assigns of the parties hereto.

<u>Protests.</u> The City of Clemson will follow protests and appeals in accordance to the Clemson Code of Ordinances, Sec 7-11.

PUBLIC RECORD and FOIA REQUESTS

After an award is made, copies of the proposals will be available. Pursuant to the South Carolina Freedom of Information Act (FOIA), City will provide copies of records in its custody unless the records are exempt from disclosure under S.C. Code Ann. §30-4-40.

Proprietary and/or Confidential Information

Your proposal is a public document under the South Carolina Freedom of Information Act (FOIA), except as to information that may be exempt from disclosure under the FOIA in the City's sole discretion. If you cannot agree to this standard, please do not submit your offer.

All information that you desire to be treated as confidential and/or proprietary must be **CLEARLY AND SPECIFICALLY** identified, and each page containing confidential and/or proprietary information, in whole or in part, must be stamped and/or denoted as **CONFIDENTIAL**, in bold, in a font of at least 12-point type, in the upper right-hand corner of the page. <u>All information not so noted and identified may be</u> <u>disclosed by the City</u>. Blanket-type identification by designating whole pages or sections as containing confidential and/or proprietary information will not ensure confidentiality.

Definitions

The words "Bidder", "Offeror", "Proposer", "Respondent", "Vendor", and "Contractor" are used interchangeably throughout this solicitation, and are used in place of the person, firm, or corporation submitting a proposal/response/offer/bid.

End of Section II

SECTION III- TECHNICAL SPECIFICATIONS

ITB 2025-01-002

Clemson Park Phase 1



Page 18 of 132



CONTRACT DOCUMENTS AND SPECIFICATIONS FOR:

2025 Clemson Park Phase 1

CITY OF CLEMSON

April 2025

Table of Contents

| Section | Description | Pages | |
|-----------------------------------|--|--------|--|
| | Part 1 - Contract Documents | | |
| | | | |
| 00200 | Information to Bidders | 7 | |
| 00300 | Bid Form | 4 | |
| 00501 | Bid Bond | 2 | |
| 00502 | Payment Bond | 2 | |
| 00503 | Performance Bond | 3 | |
| 00504 | Contract | 2 2 | |
| 00505 | Contract Change Order Form | 2 | |
| 00506 | Notice of Award | 2 | |
| 00507 | Notice to Proceed | 1 | |
| | Part 2 - General Specifications | | |
| 01000 | General Conditions | 18 | |
| 01001 | Supplemental General Conditions | 7 | |
| 01002 | Underground Damage Prevention Act | 2 | |
| 01060 | Regulatory Requirements | 1 | |
| 01061 | Permits, Fees & Rights-of-Way | 1 | |
| 01090 | Reference Standards | 1 | |
| 01400 | Measurement and Payment | 3 | |
| 01700 | Contract Closeout | 2 | |
| 01720 | Project Record Documents | 1 | |
| Part 3 - Technical Specifications | | | |
| 02221 | Trenching, Backfilling for Utilities | 6 | |
| 02750 | Site Clearing and Erosion Control | 6 | |
| 02750.4 | Tree Removal Specifications | 2 | |
| 02840 | Earth Moving | 10 | |
| 02850 | Piping General Requirements | 3 | |
| 02950 | Storm drainage, Pipe, Culverts, and Ends | 3 | |
| 03000 | Open Space Stabilization | 10 | |
| | | | |

SECTION 00200

INFORMATION TO BIDDERS

1) <u>GENERAL</u>:

The City of Clemson is soliciting bids for the construction and installation of the following:

The installation of approximately 250 LF of storm drainage pipe with associated box, an underground detention system and grading preparation for a skate park.

The successful low bidder will be expected to begin work within 10 days following the <u>Notice to</u> <u>Proceed</u>.

2) USE OF SEPARATE BID FORMS:

These Contract Documents include a complete set of bidding and Contract forms which are for the convenience of bidders. They may be detached or photocopied from the Contract Documents for purposes of bidding.

3) <u>AWARDING OF CONTRACT</u>:

Bids may be held by the City of Clemson for a period not to exceed sixty (60) days from the date of the opening of bids for the purpose of reviewing the bids and investigating the qualifications of bidders prior to awarding of the contract.

4) **INTERPRETATIONS OR ADDENDA**:

No oral interpretation will be made to any Bidder as to the meaning of the Contract Documents or any part thereof. Any inquiry received three or more days prior to the date fixed for opening of Bids will be given consideration. Every interpretation made to a Bidder will be in the form of an Addendum to the Contract Documents, and when issued, will be on file in the office of the Owner and the office of the Engineer at least two days before Bids are opened. In addition, all Addenda will be mailed or faxed to each person holding Contract Documents, but it shall be the Bidder's responsibility to make inquiry as to the Addenda issued. All such Addenda shall become part of the Contract and all Bidders shall be bound by such Addenda, whether or not received by the Bidders.

5) **INSPECTION OF SITE**:

Each Bidder shall visit the site of the proposed work and fully acquaint himself with the existing conditions there and schedule of work relating to construction and labor, and should fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The Bidder should thoroughly examine and familiarize himself with the Drawings, Technical Specifications, and all other Contract Documents. The Contractor by the execution of the Contract shall in no way be relieved of any obligation under it due to his failure to receive or examine any form or legal instrument or to visit the site and acquaint himself with the conditions there existing and the City of Clemson will be justified in rejecting any claim based on facts regarding which he should have been on notice as a result thereof.

6) <u>ALTERNATIVE BIDS</u>:

- A) All Bids must be submitted on forms supplied by the City of Clemson and shall be subject to all requirements of the Contract Documents, including the Drawings, and this INFORMATION TO BIDDERS. All Bids must be regular in every respect and no interlineations, excisions or special conditions shall be made or included in the Bid Form by the Bidder.
- B) Bid Documents, including the Bid and the Bid Guaranty shall be enclosed in envelopes (outer and inner), both of which shall be sealed and clearly labeled with the words "Bid Documents", project number, name of Bidder, Bidders License No., Contractor's License No., and date and time of Bid opening in order to guard against premature opening of the Bid.
- C) The City of Clemson may consider as irregular any Bid on which there is an alteration of or departure from the Bid Form hereto attached and at its option may reject the same.
- D) If the Contract is awarded, it will be awarded by the City of Clemson to a responsible Bidder on the basis of the lowest Bid and the selected Alternative Bid items if any. The Contract will require the completion of the work according to the Contract Documents.
- E) Each Bidder shall provide, if requested, the following information:

PRINCIPALS:

Names Social Security Numbers Home Address, including City, State & Zip Code

FIRM:

Name Treasury Number Address, including City, State & Zip Code

7) <u>BID GUARANTY</u>:

- A) The Bid must be accompanied by a Bid Guaranty which shall not be less than five percent (5%) of the amount of the Bid. At the option of the Bidder, the guaranty may be a certified check, bank draft, negotiable U.S. Government Bond (at par value), or a Bid Bond in the form of the attached. The Bid Bond shall be secured by a guaranty or a surety company holding certificates of authority as accepted sureties (31 CFR 223). No Bid will be considered unless it is accompanied by the required guaranty. Certified check or bank draft must be made payable to the order of the City of Clemson. Cash deposits will not be accepted. The Bid guaranty shall insure the execution of the Agreement and the furnishing of the Surety Bond or Bonds by the successful Bidder, all as required by the Contract Documents.
- B) Revised Bids submitted before the opening of Bids, whether forwarded by mail or telegram, if representing an increase in excess of two percent (2%) of the original Bid, must have the Bid Guaranty adjusted accordingly, otherwise the Bid will not be considered.
- C) Certified checks or bank drafts, or the amount thereof, Bid Bonds, and negotiable U.S. Government bonds of unsuccessful Bidders will be returned as soon as practical after the opening of the Bids.

8) <u>COLLUSIVE AGREEMENTS</u>:

- A) Each Bidder submitting a Bid to the City of Clemson for any portion of the work contemplated by the documents on which Bidding is based shall execute and attached thereto, a statement substantially in the form herein provided, to the effect that he has not entered into a collusive agreement with any other person, firm, or corporation with regard to any Bid submitted.
- B) Before executing any subcontract the successful Bidder shall submit the name of any proposed subcontractor for prior approval by the Engineer and The City of Clemson. The Contractor shall not use any unapproved Subcontractors nor shall any additional compensation be allowed because of rejection by the Engineer or the City of Clemson of any Subcontractor.

9) <u>STATEMENT OF BIDDER'S QUALIFICATIONS</u>:

Each Bidder shall, upon request of the City of Clemson, submit on the form furnished for that purpose a statement of the Bidder's qualifications, his experience record in constructing the type of improvements embraced in the contract, his organization and equipment available for the work contemplated, and when specifically requested by the City of Clemson, a detailed financial statement. The City of Clemson shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under the Contract and the Bidder shall furnish the City of Clemson all such information and data for this purpose as it may request. The right is reserved to reject any Bid where an investigation of the available evidence or information does not satisfy the City of Clemson that the Bidder is qualified to carry out properly the terms of the Contract.

10) <u>UNIT PRICES</u>:

The unit price for each of the several items in the proposal of each Bidder shall include its pro rata share of overhead and profit so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price Bid represents the total. Any Bid not conforming to this requirement may be rejected as informal. The special attention of all Bidders is called to this provision, for should conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities, nor extra compensation allowed, provided the net monetary value of all such additive and subtractive changes in quantities of such items of work (i.e., difference in cost) shall not increase or decrease the total original contract price by more than twenty-five percent (25%), except for work not covered in the Drawings and Technical Specifications as provided for in the General Conditions.

11) <u>CORRECTIONS</u>:

Erasures or other changes in the Bids must be explained or noted over the signature of the Bidder.

12) <u>TIME FOR RECEIVING BIDS</u>:

- A) Bids received prior to the advertised hour of opening will be securely kept and sealed. The officer whose duty to open them will decide when the specified time has arrived, and no Bid received thereafter will be considered: except that when a Bid arrives by mail after the time fixed for opening, but before the reading of all other Bids is completed, and it is shown to the satisfaction of the City of Clemson that the non-arrival on time was due solely to delay in the mail for which the Bidder was not responsible, such Bid will be received and considered.
- B) Bidders are cautioned that, while telegraphic modifications of Bids may be received as provided above, such modifications, if not explicit and if in any sense subject to misinterpretation, shall make the Bid so modified or amended, subject to rejection.

13) OPENING OF BIDS:

At the time and place fixed for the opening of Bids, the City of Clemson will cause to be opened and publicly read aloud every Bid received with the time set for receiving Bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by representative.

14) <u>WITHDRAWAL OF BID</u>:

Bids may be withdrawn or written or telegraphic request dispatched by the Bidder in time for delivery in the normal course of business to the time fixed for opening; provided that written confirmation of any telegraphic withdrawal over the signature of the Bidder is placed in the mail and postmarked prior to the time set for Bid opening. The Bid guaranty of any Bidder withdrawing his Bid in accordance with the foregoing conditions will be returned promptly.

15) AWARD OF CONTRACT - REJECTION OF BIDS:

- A) Award will be made to the lowest responsible, responsive BIDDER. A responsive bidder is defined as one whose bid is complete and submitted in accordance with the contract documents without excision, special conditions or alternate bids (unless specifically requested in the bid form). A responsible bidder is defined as one who maintains a permanent place of business, has adequate plant equipment to complete the work properly and within the established time limit, has adequate financial status to meet his obligations contingent to the work, is properly licensed, and is considered by the City of Clemson and Engineer to be capable of performing the work in accordance with the contract documents.
- B) The City of Clemson reserves the right to consider as unqualified to do the work any Bidder who does not habitually perform, or does not plan to perform, with his own forces the major portion of the work involved in construction of the improvements embraced in this Contract. The maximum amount of subcontract work shall not exceed 30 percent of the total project cost without prior approval of the City of Clemson. The City of Clemson reserves the right to either accept or reject any bid where the planned subcontract amount exceeds 30% of the total bid amount.
- C) The City of Clemson may hold all bids for a period not to exceed sixty (60) days from the date of opening the bids for review before awarding the contract.

16) EXECUTION OF AGREEMENT - PERFORMANCE AND PAYMENT BOND:

- A) Subsequent to the award and within ten (10) days after the prescribed form are presented for signature, the successful Bidders shall execute and deliver to the City of Clemson an Agreement in the form included in the Contract Documents in such number of copies as the City of Clemson may require.
- B) Having satisfied all conditions of award as set forth elsewhere in these documents, the successful Bidders shall, within the period specified in paragraph "A" above, furnish a surety bond in a penal sum no less than the amount of the Contract as awarded, as security for the faithful performance of the Contract, and for the payment of all persons, firms, or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment, or service of any nature including utility and transportation services, employed or used by him in performing the work. Such bond shall be in the same form as that included in the Contract. Documents and shall bear the same date as, or a date subsequent to that of the Agreement. The current power of attorney for the person who signs for any surety company shall be attached to such bond. All bonds shall be countersigned by a resident agent of the State in which the work takes place.

17) <u>CONTRACTOR LICENSES</u>:

The Bidder shall have a valid Contractor's license at the time of the Bid to Bid and perform work in the State of South Carolina. The limits of such licenses must be equal to or greater than the work on which a Bid is submitted. The Contractor's license number is to be written on the outside of the Bid envelope. Failure to list the Contractor's license numbers may be cause for the Bid to be rejected.

18) <u>BUSINESS LICENSES</u>:

The Bidder shall have an active and updated City of Clemson Business License prior to mobilization to the project site and must maintain said business license throughout the duration of the Contract, and any lost working time as a result of not being in possession or not updating a business license will be the sole responsibility of the Bidder. This shall apply to any general contractor or sub-contractors associated with the project.

19) <u>TIME FOR COMPLETION</u>:

The substantial completion time for this project is **90** consecutive days to begin on the date designated on the Notice to Proceed, the underground system and skate park grading must be completed by March 15, 2025. If the project remains uncompleted past the completion date, the Bidder will become liable for liquidated damages in the amount of \$200.00 per calendar day for each day the project remains uncompleted.

20) <u>LIQUIDATED DAMAGES</u>:

- A) Should the lowest responsive Bidder fail or refuse to enter into a contract within 7 days after receipt of the written notice of award, the Bidder shall forfeit to the City of Clemson, as liquidated damages for failure or refusal to enter into a contract with the City of Clemson, the Bid Guaranty presented as security for the Bid.
- B) The Bidder must agree to commence work and complete the project as stipulated in the Contract. The Bidder must also agree to pay \$200.00 per day as liquidated damages as specified in the Special Provisions for each calendar day that the work remains incomplete after the contract completion date.

21) LICENSES AND PERMITS:

The statement of Bidder must secure all State and local building permits required. Such permits must be readily available at all times for inspection.

22) STATEMENT OF BIDDER'S QUALIFICATIONS:

The Statement of Bidder's Qualifications is not required to be submitted with the Bid. If requested by the City of Clemson after the Bid, the Statement of Bidder's Qualifications is to be completed and returned to the City of Clemson within five (5) days of such request. Failure by the Bidder to complete the Statement of Bidder's Qualifications within 5 days may result in the Bid being rejected by the City of Clemson.

23) <u>INSPECTION</u>:

The work is to be jointly inspected by the Engineer and the City of Clemson. All work is subject to inspection and approval of the Engineer, the City of Clemson, South Carolina Department of Health and Environmental Control and South Carolina Department of Transportation. The Contractor shall immediately repair and rework any and all work not approved by the above approving agencies.

END OF SECTION

SECTION 00300

BID FORM

2025 Clemson Park Phase 1

| BIDDER: | |
|--|--|
| DATE: | |
| ADDRESS: | |
| | |
| TELEPHONE NUMBER: | |
| CONTRACTOR'S LICENSE NO: | |
| TO OWNER: <u>CITY OF CLEMSON</u> 1250-5 Tiger Boulevard | |
| Clemson, SC 29631 | |

1) The undersigned, having familiarized himself with the existing conditions of the Project Area affecting the cost of the work, and with the Contract Documents (which includes Invitation for Bids, the form of Bid, Technical Specifications, and Drawings) on file in the office of the Owner hereby proposes to furnish all Supervision, technical personnel, labor, materials, machinery, tools, appurtenances, equipment and services, including utility and transportation services required to construct the project in accordance with the above listed documents at, and for the prices for work in place for the following items and quantities:

| 2025 Clemson Park Phase 1 Bid Form | | | | | |
|------------------------------------|-----------------------------------|--------------|----------|---------------|-------|
| | Base Bid Station 0+00 to 25+99 | | | | |
| ltem number | Item | Unit | Quantity | Unit Price | Total |
| 1 | Mobilization | LS | 1 | | |
| 2 | Erosion Control | LS | 1 | | |
| 3 | Clearing & Grubbing | LS | 1 | | |
| 4 | Tree Removal | Each | 17 | | |
| 5 | Demolition | LS | 1 | | |
| 6 | 15" HDPE | LF | 228 | | |
| 7 | 24" HDPE | LF | 10 | | |
| 8 | 8" PVC (Storm) | LF | 25 | | |
| 9 | 12" PVC (Storm) | LF | 43 | | |
| 10 | Underground Detention (storm) | LS | 1 | | |
| 11 | Grate Inlet <10' | Each | 6 | | |
| 12 | Area Drain | Each | 6 | | |
| 13 | Skate Park Grading | LS | 1 | | |
| 14 | Temporary Stabilization | LS | 1 | | |
| | Skate Park (Spohn Ranch) gener | al condition | าร | | |
| 15 | Spohn Ranch Coordination | Month | 6 | | |

Total Bid Base Bid: _____

Total Bid Amount Written Out:

Total Bid with Bid Alternate: _____

Total Bid with Bid Alternate Amount Written Out:

2) The Contractor acknowledges that the quantities noted above are not intended to specifically identify all possible permanent and/or temporary components, including labor required to successfully bid and complete the project. Accordingly, it is the contractor's sole responsibility to provide a comprehensive total cost to complete the entire project as represented in the drawings and specifications, within these unit prices. If the contractor feels there is a discrepancy in the units listed herein versus what is represented in the drawings or a unit item is missing that should be included it is the Contractor's sole responsibility to bring any such concern to the Owner and Engineer's attention within the specified portion of the bid phase, and failure to do so does not relieve the contractor of the requirement to complete the project in accordance with approved contract documents and governing codes and regulations, including but not limited to ADA and OSHA.

3) The Contractor acknowledges that additional items may be required or requested by the Owner during the construction of the project, and will be added to or deducted from the Contract Sum by appropriate modification if the scope of work or estimated quantities of work required by the Contract Documents are increased or decreased. "By Order of the Owner's Representative" is the method at which use of the unit prices are determined. If work is deemed necessary to add such items otherwise not indicated by the drawings, the contract unit price for such items will prevail in and change order agreement for such items.

4) IN SUBMITTING THIS Bid, the Bidder understands that the right is reserved by the City of Clemson to reject any and all Bids. If written notice of the acceptance of this bid is mailed, telegraphed or delivered to the undersigned within forty-five (45) days after the opening thereof, or at any time thereafter, before this bid is withdrawn, the undersigned agrees to execute and deliver an agreement in the prescribed form and furnish the required bond within ten (IO)'days after the agreement is presented to him for signature.

| 5) Security in the sum of dolla | ars (\$) |
|---------------------------------|----------|
|---------------------------------|----------|

the form of ______ is submitted herewith in accordance with the

INSTRUCTION TO BIDDERS.

6) Bidder's signature hereto is a statement in proof that the undersigned has not entered into a collusive agreement with any person in respect to this bid or any other bid or the submitting of Bids for the Contract for which this Bid is submitted.

A) Neither the said Bidder or any of its officers, partners, owners, agents, representative, employees or parties in interest, including his affiant, has in any way colluded, conspired,

connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices the attached Bid or of any other bidder, or to fix any overhead, profit or cost element collusion, conspiracy, connivance or unlawful agreement any advantage against the OWNER or any person interested in the proposed Contract; and

B) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Signed: _____

7) Bidder's signature hereto is a statement in proof that the undersigned has received and understands any addendum which have been issued as part of this solicitation, If no addendums have been issued then this does not need to be filled out.

| Addendum #1 | Date:: Verification Signature: |
|-------------|-----------------------------------|
| Addendum #2 | Date:: Verification Signature: |
| Addendum #3 | Date:: Verification Signature: |

END OF SECTION

SECTION 00501

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____

| | , as | Principal, and | as Surety, are |
|-----------------------|--------------|-------------------------------|------------------------------------|
| hereby held and firm | mly bound un | to the <u>CITY OF CLEMSON</u> | , as OWNER, in the penal sum of |
| \$ | 1 | for the payment of which, w | ell and truly to be mad, we hereby |
| jointly and severally | bind ourselv | es, successors and assigns | Э. |
| Signed this | _ day of | , 2025. | |

The Conditions of the obligation is such that whereas the Principal has submitted to the <u>City of</u> <u>Clemson</u> a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the **2025 Clemson Park Phase 1**.

NOW, THEREFORE,

- A) If said Bid shall be rejected, or
- B) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attachment hereto (properly completed in accordance with said BID) and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these present to be signed by their proper officers, the day and year first set forth above.

| | Principa | 1 | _ |
|------|----------|---|-------|
| | | | |
| | | | |

Surety

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended), be authorized to transact business in the state where the project is located.

END OF SECTION

SECTION 00502

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

а

Contractor **Contractor Address** , hereinafter called Principal. Corporation, Partnership or Individual Surety Surety Address hereinafter called Surety, are held and firmly bound unto:

> City of Clemson Owner

1250 Tiger Boulevard, Suite 5, Clemson, SC 29631 Owner Address

Hereinafter called Owner, in the penal sum of ______ dollars (\$ _____ in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, 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 OWNER, dated the day of 2025, a copy of which is hereto attached and made a part hereof for the construction of: 2025 Clemson Park Phase 1.

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these present to be signed by their proper officers, the day and year first set forth above.

| | | _ (L.S.) |
|-----------|---------------------------------------|----------|
| | Principal | |
| | | |
| | | |
| _ | Curchy | |
| | Surety | |
| | | |
| B | y: | |
| | | |
| | | |
| Countersi | gned by South Carolina Resident Agent | |
| | | |
| | | |
| | Name (Typed) | |
| | | |
| | | |
| | | |
| | Agency Name | |
| | | |
| | | |
| | Agency Address | |
| | | |
| | | |
| | | |
| | Signature | |
| | | |

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended), be authorized to transact business in the state where the project is located; and be regulated by the respective state insurance commission.

END OF SECTION

SECTION 00503

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

| | Contractor |
|------------|---|
| | |
| | |
| | Contractor Address |
| | |
| а | , hereinafter called |
| Principal, | , |
| | |
| ar | nd |
| | Surety |
| | |
| | Surety Address |
| hereinafte | er called Surety, are held and firmly bound unto: |
| | City of Clemson |
| | Owner |
| | 1250 Tiger Boulevard, Suite 5, Clemson, SC 29631 |
| | Owner Address |

Hereinafter called Owner, in the penal sum of ______ dollars, (\$_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by the presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the principal entered into a certain contract with the Owner, dated the ______ day of ______, 2025, a copy of which is hereto attached and made a part of hereof for the construction of: **2025 Clemson Park Phase 1.**

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original team thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of

Page 37 of 132

failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder of the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in THREE (3) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 2025.

Principal Secretary

Seal (above)

Seal (above)

Witness to Principal

Address

Principal

Address

Surety Secretary

Ву: _____

Witness to Surety

ATTEST:

| | | Ву: | | |
|--------------------|-----------------------------|------------|--|--|
| | | , <u> </u> | Attorney-In-Fact | |
| A | ddress | | · | |
| | | | | |
| | | | | |
| | | | | |
| | | | Address | |
| S | Surety | | | |
| Countersigned by S | South Carolina Resident Age | nt: | | |
| | Name | (Typed) | ······································ | |
| | | , | | |
| | | | | |
| | Signature | | | |
| | | | | |
| | | | | |
| | | y Name | | |
| | Agene | y Name | | |
| | | | | |
| | | | | |

Agency Address

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended), be authorized to transact business in the state where the PROJECT is located; and be regulated by respective state insurance commission.

CONTRACT

| THIS AGREEMENT made this | day of | , 2025, by and between |
|--------------------------|--------|------------------------|
|--------------------------|--------|------------------------|

(a corporation organized

and existing under the laws of the State of South Carolina) hereinafter called the

CONTRACTOR, and the City of Clemson, SC hereinafter called the OWNER.

WITNESSETH, that the Contractor and the local Public Agency for the considerations stated herein mutually agree as follows:

ARTICLE I: Statement of Work. The Contractor shall furnish all supervision, technical personnel, labor, materials, tools, equipment and services, including utility and transportation services, and perform and complete all work required for the construction of the Improvements embraced in the Project, all within <u>90</u> days from the date of Notice to Proceed, the skate park grading must be completed by March 15th, 2025; namely <u>2025 Clemson Park Phase 1</u> all in strict accordance with the Contract Documents including all Addenda thereto, numbered.

ARTICLE II: The Contract Price. The Owner will pay the Contractor for the performance of the Contract, in current funds, the sum of

\$_______ dollars or as shown in the Bid Schedule, for the total quantities of work performed, at the unit prices stipulated in the bid, for the several respective items of work completed, subject to additions and deductions as provided in the General Conditions

ARTICLE III: Contract. The executed contract documents shall consist of the following:

- A) This Agreement
- B) Addenda
- C) Invitation to Bid
- D) Information to Bidders
- E) Signed Copy of Bid

- F) General Conditions
- G) Supplemental Conditions
- H) Technical Specifications
- I) Drawings

THIS AGREEMENT, together with other documents enumerated in this Article III, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, forms the Contract between the parties hereto. In the event that any provision of any component part of this Contract conflicts with any provisions of any other component part of this Contract the provision of the component part first enumerated in this Article III shall govern, except as otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed in THREE (3) original copies on the day and year first written.

CITY OF CLEMSON, SC Owner

BY: ANDY BLONDEAU

| Signature | | | | |
|-----------------------------|--|--|--|--|
| CITY ADMINISTRATOR Title | | | | |
| & | | | | |
| | | | | |
| Contractor | | | | |
| BY: | | | | |
| | | | | |
| Signature | | | | |
| | | | | |
| Title | | | | |
| | | | | |

CONTRACT CHANGE ORDER FORM

Project : _____

Date : _____

Change Order No.

Contractor : _____

Description (quantities, units, unit prices, change in contract time, etc.) and necessity of changes (attach adequate documentation, maps, correspondence, etc.) :

Please attach documentation with associated changes (show increase and decrease in contract price):

| Original Contract Price: | \$ | | | |
|---|---|--|--|--|
| Total Decrease of this Change Order: | \$ | | | |
| Total Increase of this Change Order: | \$ | | | |
| Net (Increase) / (Decrease) in Contract Price: | \$ | | | |
| Current Contract Price after this Change Order: \$ | | | | |
| ne sum of \$, is hereby (added to) / (deducted from) the total | | | | |
| contract price, and the total adjusted contract price to date thereby is \$ | | | | |
| The time p | rovided for completion in the contract is | | | |
| (unchanged) / (increased) / (decreased) by calendar days. This document shall | | | | |
| become an amendment to the contract and all provisions of the contract will apply hereto. | | | | |
| Liquidated damages will be assessed: | _(yes) / (no)\$ / days | | | |
| | | | | |

Total \$ _____.

| Recommended by: | | |
|-----------------|------------|------|
| | Engineer | Date |
| | 0 | |
| | | |
| Accepted by: | | |
| . , | Contractor | Date |
| | | |
| | | |
| Approved by: | | |
| | Owner | Date |
| | | |

NOTICE OF AWARD

То: _____

Project: 2025 Clemson Park Phase 1

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated _____ day of _____ 2025 and Information for Bidders.

You are hereby notified that your BID has been accepted for items (base bid) in the amount of \$______.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND, and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as way be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER. Dated this _____ day of _____ 2025.

CITY OF CLEMSON Owner

By: Andy Blondeau

Signature

<u>CITY Administrator</u> Title

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by, this the _____ day of _____ 2025.

By: _____

Title

NOTICE TO PROCEED

TO: _____

DATE: _____

PROJECT: 2025 Clemson Park Phase 1

You are hereby notified to commence work in accordance with the Agreement dated this ______ day of ______ 2025 and you are to complete the WORK within ______ consecutive calendar days thereafter. The date of completion of WORK is therefore the ______ day of ______ 2025.

CITY OF CLEMSON Owner

By: NATHAN HINKLE

Signature

CITY ENGINEER Title

ACCEPTANCE OF NOTICE

Ву:_____

Title

GENERAL CONDITIONS

1) CONTRACT & CONTRACT DOCUMENTS:

The plans, specifications, and addenda, hereinafter enumerated shall form part of this contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents titles, heading, running headlines and marginal notes contained herein and in said documents are solely to facilitate reference to various provisions of the contract documents and in on way affect, limit or cast light on the interpretations of the provisions to which they refer.

Contents

- 1 Contract and Contract Documents
- 2 Definitions
- 3 Additional Instructions and Detail Drawings
- 4 Shop Drawings and Samples
- 5 Materials, Services & Facilities
- 6 Contractor's Title to Materials
- 7 Inspection and Testing of Materials
- 8 "Or Equal" Clause
- 9 Patents
- 10 Surveys, Laws, and Regulations
- 11 Contractor's Obligations
- 12 Weather Conditions
- 13 Protection of Work and Property, Emergency
- 14 Interpretations
- 15 Reports, Records and Data
- 16 Superintendence by Contractor
- 17 Changes in Work
- 18 Extras
- 19 Time for Completion and Liquidated Damages
- 20 Correction of Work
- 21 Subsurface of Conditions
- 22 Claims for Extra Cost
- 23 Right of Owner to Terminate Contract
- 24 Construction Schedule and Periodic Estimates

- 25 Payments to Contractor
- 26 Acceptance of Work and Final Payment
- 27 Acceptance of Final Payment as Release
- 28 Payments by Contractor
- 29 Insurance
- 30 Contract Security
- 31 Assignments
- 32 Mutual Responsibility
- 33 Separate Contracts
- 34 Subcontracting
- 35 Engineer's Authority
- 36 Stated Allowances
- 37 Use of Premises and Removal of Debris
- 38 Quantities of Estimate
- 39 Rights-of-Way and Suspension of Work
- 40 Warranty for One Year after Completion of Contract
- 41 Notice and Service Thereof
- 42 Required Provisions Deemed Inserted
- 43 Protection of Lives and Health
- 44 Wages and Overtime Compensation
- 45 Prohibited Interests
- 46 Conflicting Conditions
- 47 Public Convenience and Protection

2) <u>DEFINITIONS</u>:

A) <u>Contractor</u>: A person, firm or corporation with whom the contract is made by the Owner.

- B) <u>Subcontractor</u>: A person, firm or corporation supplying labor and materials, or only labor, for work at the site of the project for and under separate contract or agreement with the Contractor
- C) <u>Work on or at the Project</u>: Work to be performed at the location of the project, including the transportation of materials and supplies to or from the location of the project by employees of the Contractor and any Subcontractor.

3) ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS:

The Contractor will be furnished additional instructions and detail drawings as necessary to carry out the work included in the Contract. The additional drawings and instructions thus supplied to the Contractor will coordinate with the Contract Documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry on the work in accordance with the additional detail drawings and instructions, The Contractor and the Engineer will prepare jointly:

- A) A schedule fixing the dates at which special detail drawings will be required; such drawings, if any, to be furnished by the Engineer in accordance with said schedule; and
- B) A schedule fixing the respective dates for the submission of shop drawing, the beginning of manufacture, testing and installation of materials, supplies, and equipment, and the completion of the various parts of the work; each such schedule to be subject to change from time to time in accordance with the progress of the work.

4) <u>SHOP DRAWINGS AND SAMPLES</u>:

Submit to the Engineer for approval, in accordance with the requirement of Section 01340.

- A) <u>Samples</u>: Contractor shall also submit to the Engineer for approval, all samples required by Section 01340. All samples will have been checked by and stamped with the approval of the Contractor, identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended.
- B) <u>Deviations</u>: At the time of each submission, Contractor shall in writing call the Engineer's attention to any deviations that the Shop Drawings or samples may have from the requirements of the Contract Document.
- C) Engineer's Review: Engineer will review and approve with reasonable promptness Shop Drawings and samples, but his review and approval shall be only for conformance with the design concept of the project and for compliance with the information given in the Contract Documents. The approval of a separate item as such will not indicate approval of the assembly in which the item functions. Contractor shall make any corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and resubmit new samples until approved. Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections called for by Engineer or previous submissions. Contractor's stamp of approval on any Shop Drawing or sample shall constitute a representation to Owner and Engineer that Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers and similar data or he assumes full responsibility for doing so, and that he has reviewed or coordinated each Shop Drawing or sample with the requirements of the work and Contract Documents.
- D) <u>Contractor's Records</u>: Where a Shop Drawing or sample submission is required by the Specifications, no related work shall be commenced until the submission has been approved by Engineer. A copy of each approved shop drawing and each approved

sample shall be kept in good order by Contractor at the site and shall be available to Engineer.

E) <u>Contractor's Responsibility</u>: Engineer's approval of Shop Drawings or sample shall not relieve Contractor from his responsibility for any deviations from the requirements of the Contract Documents unless Contractor has in writing called the Engineer's attention to such deviation at the time of submission and Engineer has given written approval to the specific deviation, nor shall any approval by Engineer relieve Contractor from responsibility for errors or omissions in the Shop Drawings.

5) MATERIALS, SERVICES AND FACILITIES:

Materials, services and facilities shall be furnished by the Contractor.

- A) It is understood that except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, gas, lights, power, transportation superintendence, taxes, insurance, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete and deliver the work within the specified time.
- B) Any work necessary to be performed after regular working hours, on Sundays, or legal holidays, shall be performed without additional expense to the Owner.

6) <u>CONTRACTOR'S TITLE TO MATERIALS</u>:

No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies used by him in the work, free from all liens, claims or encumbrances.

7) INSPECTION AND TESTING OF MATERIALS:

Unless otherwise specifically provided for in the specifications, the inspection and testing of material and finished articles to be incorporated in the work at the site shall be made by bureaus, laboratories, or agencies approved by the Owner. The cost of such inspection and testing shall be paid by the Contractor.

- A) <u>Certification by Contractor</u>: Where the detailed specifications call for certified copies of mill or shop tests to establish conformance of certain materials with the specifications, it shall be the responsibility of the Contractor to assure delivery of such certifications to the Owner. No materials or finished articles shall be incorporated in the work until such materials and finished articles have passed the required tests. The Contractor shall promptly segregate and remove rejected material and finished articles from the site of the work.
- B) <u>Guaranty</u>: The testing and approval of materials by the laboratory, or laboratories, shall not relieve the Contractor of any of his obligations to fulfill his contract and guarantee of workmanship and materials as called for in paragraph entitled "General Warranty for One Year After Completion of Contract" herein. The Contractor may, at his option and at his own expense, cause such other tests to be conducted as he may deem necessary to assure suitability, strength, and durability of any material or finished article.
- 8) <u>"OR EQUAL" CLAUSE</u>:

The phrase "or equal" shall be construed to mean that material or equipment will be acceptable only when, in the judgment of the Engineer, they are composed of parts of equal quality, or equal workmanship and finish, designed and constructed to perform or accomplish the desired result as efficiently as the indicated brand, pattern, grade, class, make or model. Written approval will be obtained from the Engineer prior to installation.

9) <u>PATENTS</u>:

The Contractor shall hold and save the Owner and its officers, agents, servants, al).d employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract documents. If the Contractor uses any design, device or materials covered by letter, patent, or copyright, he shall provide for such use by suitable agreement with the Owner of such patented or copyrighted design, device or material. It is mutually agreed and understood that, without exception, the contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or his sureties shall indemnify and save harmless the Owner of the project from any and all claims for infringements by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract, and shall indemnify the Owner for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

10) SURVEYS, LAWS AND REGULATIONS:

The Contractor shall keep himself fully informed of all laws, ordinances and regulations of State, City and County in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over same. If any discrepancy or inconsistency should be discovered in this contract, or in the drawings or specifications herein referred to, in relation to any such law, ordinance, regulation, order or decree, he shall forthwith report the same in writing to the Owner. He shall at all times himself observe and comply with all such existing and future laws, ordinances and regulations, (to the extent that such requirements do not conflict with Federal laws or regulations) and shall protect and indemnify the Owner and its agents against any claims or liability arising from or based on the violation of any such law, ordinance, regulations, order or decree, whether by himself or by his employees.

11) CONTRACTOR'S OBLIGATIONS:

The Contractor shall, in good workmanlike manner, so and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract, within the time herein specified, in accordance with provisions of this contract and said specifications, and in accordance with the plans and drawings covered by this contract and any and all supplemental plans and drawings and in accordance with the directions of the Engineer as given from time to time during the progress of the work. He shall furnish, erect, maintain and remove such construction plant and such temporary works as may be required. The contractor shall observe, comply with, and be subject to all terms, conditions,

requirements and limitations of the contract and specifications, and shall do, carry on and complete the entire work to the satisfaction of the Engineer and the Owner.

12) WEATHER CONDITIONS:

In the event of temporary suspension of work or during inclement weather, or whenever the Engineer shall direct, the Contractor will, and will cause his subcontractors to, protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Engineer, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his Subcontractors to so protect its work, such materials shall be removed and replaced at the expense of the Contractor.

13) PROTECTION OF WORK AND PROPERTY, EMERGENCY:

The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work and that of adjacent property from damage. The Contractor shall replace or make good any such damage, loss or injury unless such be caused directly by errors contained in the contract or by the Owner or by his duly authorized representatives. In case of emergency which threatens loss or injury of property and/or safety of life, the Contractor will be allowed to act, without previous instructions form the Engineer, in a diligent manner. He shall notify the Engineer immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the Engineer for approval. Where the Contractor has not taken action but has notified the Engineer of an emergency threatening injury to persons or damage to the work or any adjoining property, he shall act as instructed or authorized by the Engineer. The amount of reimbursement claimed by the Contractor on account of any emergency action shall be determined in the manner provided in paragraph entitled "Changes in Work" of these specifications.

14) INTERPRETATIONS:

If any person contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of these proposed contract documents, he may submit to the Engineer a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt and actual delivery. Any interpretation of such documents will be made only by addendum duly issued, and a copy of such addendum will be mailed or delivered to each person receiving a set of such documents. The Owner will not be responsible for any other explanation or interpretation of such documents which anyone presumes to make on behalf of the Owner before expiration of the ultimate time set for the receipt of bids.

15) <u>REPORTS, RECORDS AND DATA</u>:

The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the Owner may request concerning work performed or to be performed under this contract.

16) <u>SUPERINTENDENCE BY CONTRACTOR</u>:

The Contractor shall employ only competent and skilled men on the work. The contractor shall have a competent Superintendent or Foreman present at all times when the work is in progress, who shall have full authority to act for the Contractor. It is understood that such representative

shall be acceptable to the Engineer and shall be one who can be continued in that capacity for the particular job involved unless he ceases to be on the Contractor's payroll. The Contractor shall, upon demand from the Engineer, immediately remove any Superintendent, Foreman or workman whom the Engineer may consider incompetent or undesirable.

17) CHANGES IN WORK:

No changes in the work covered by the approved contract documents shall be made without having prior written approval of the Owner. Charges or credits for the work covered by the approved change shall be determined by one or more, or a combination of, the following methods:

- A) Unit bid prices previously approved
- B) An agreed lump sum
- C) The actual cost of:
 - 1) Labor, including foreman
 - 2) Materials entering permanently into the work

3) The ownership or rental cost of construction plant and equipment during the time of use on the extra work

- 4) Power and consumable supplies for the operation of power equipment
- 5) Insurance
- 6) Social security and old age and unemployment contributions

18) <u>EXTRAS</u>:

Without invalidating the contract, the Owner may order extra work or make changes by altering, adding to or deducting from the work, the contract sum being adjusted accordingly, and the consent of the surety being first obtained where necessary or desirable. All the work of the kind bid upon shall be paid for at the price stipulated in the proposal, and no claims for any extra work or materials shall be allowed unless the work is ordered in writing by the Owner, or the Engineer acting officially for the Owner, and the price is stated in such order. Extra work shall be performed only upon the execution of authorized change orders as set forth in the preceding paragraph.

19) <u>TIME FOR COMPLETION AND LIQUIDATED DAMAGES</u>:

It is hereby understood and mutually agreed by and between the Contractor and the Owner that the date of beginning and the time for completion as specified in the contract of the work to be done hereunder are essential conditions of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the Notice to Proceed.

- A) <u>Regular Prosecution of Work</u>: The Contractor agrees that said work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for completion of the work described herein is a reasonable time for completion of same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.
- B) <u>Liquidated Damages</u>: If the Contractor shall neglect, fail, or refuse to complete the work within the time herein specified, or any proper extensions thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the Owner the amount specified in the contract not as a penalty but as

liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the contract for completing the work. The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticality and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be in the amount of damages which the Owner would sustain and said amount shall be retained from time to time by the Owner from current periodical estimates.

- C) Extension of Time for Completion: It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided, that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due:
 - a) To any preference, priority or allocation order duly issued by the Government
 - b) To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, or of the public enemy, acts of the Owner, acts of another contractor in the performance of a contract with the Owner; fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather; and
 - c) To any delays of subcontractors or suppliers occasioned by any of the causes specified in subsections 1 and 2 of this article.

Provided, further, that the Contractor shall, within seven (7) days from the beginning of such delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the contract, notify the Owner in writing of the causes of delay, who shall ascertain the facts and extent of delay and notify the Contractor within a reasonable time of its decision in the matter, and grant such extension of time as the Owner shall deem suitable and just.

20) CORRECTION OF WORK:

All work, all materials, whether incorporated in the work or not, all processes of manufacture, and all methods of construction, shall be at all times and places subject to the inspection of the Engineer, who shall be the final judge of the quality and suitability of the work, materials, processes of manufacture, and methods of construction of the purposes for which they are used. Should they fail to meet his approval, they shall be forthwith reconstructed, made good, replaced and/or corrected, as the case may be, by the Contractor at his own expense. Rejected material shall immediately be removed from the site. If, in the opinion of the Engineer, it is undesirable to replace any defective Or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the contract documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as, in the judgment of the Engineer, shall be equitable.

21) <u>SUBSURFACE CONDITIONS FOUND DIFFERENT</u>:

Should the Contractor encounter subsurface and/or latent conditions at the site materially differing from those shown on the plans or indicated in the specifications, he shall immediately give notice to the Engineer of such conditions before they are disturbed. The Engineer will thereupon promptly investigate the conditions, and if he finds that they materially differ from

those shown on the plans or indicated in the specifications, he will at once make such changes in the plans and/or specifications as he may find necessary; any increase or decrease of cost resulting from such changes to be adjusted in the manner provided in paragraph 17 of these specifications. Where no specific subsurface conditions are indicated or specified, no increase in cost will be considered in regards to subsurface conditions encountered.

22) <u>CLAIMS FOR EXTRA COSTS</u>:

No claim for extra work or cost shall be allowed unless the same was done in pursuance of a written order of the Engineer, as aforesaid, and the claim presented with the first estimate after the changed or extra work is done. When work is performed under the terms of subparagraph *17C* of these specifications, the Contractor shall furnish satisfactory bills, payrolls and vouchers covering all items of cost and when requested by the Owner, give the Owner access to accounts relating thereto.

23) <u>RIGHT OF OWNER TO TERMINATE CONTRACT</u>:

In the event that any of the provisions of this contract are violated by the Contractor or by any of his subcontractors, the Owner may serve written notice upon the Contractor and the surety of its intention to terminate the contract, such notices to contain the reasons for such intention to terminate the contract, and unless within 10 days after the serving of such notice upon the Contractor, such violation or delay shall cease and satisfactory arrangement or correction be made, the contract shall, upon the expiration of said 10 days, cease and terminate. In the event of any such termination, the Owner shall immediately serve notice thereof upon the surety and the Contractor, and the surety shall have the right to take over and perform the contract; provided, however, that if the surety does not commence performance thereof within 10 days from the date of the mailing to such surety of notice of termination, the Owner may take over the work and prosecute same to completion by contract or by force account for the account and at the expense of the Contractor, and the Contractor and his surety shall be liable to the Owner for any excess cost occasioned the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work such materials, appliances and plant as may be on the site of the work and necessary therefore. If the Contractor should die, be declared an incompetent, be declared bankrupt or insolvent, make an assignment for the benefit of creditors during the term of his contract, the Owner may terminate the contract in the manner and under the procedure set forth above with the exception that no notices to the Contractor shall be required, but in lieu thereof the Owner must make a reasonable effort to notify the estate of the Contractor, his guardian, assignee, or legal representative of the intention to terminate and fact of termination, if there is any such guardian, assignee, or legal representative at the time the Owner desires to terminate.

24) CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES:

Immediately after execution and delivery of the contract and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the contract documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule.

- A) Contractor's Estimate: The contractor shall also furnish
 - a) A detailed estimate, giving a complete breakdown of the contract price; and

- b) Periodic itemized estimates of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for addition to or deductions form the contract price
- B) Equipment Delivery Schedule: The Contractor shall also prepare a schedule of anticipated shipping dates for materials and equipment. It is intended that equipment and materials be so scheduled as to arrive at the job site just prior to time for installation to prevent excessive materials on hand for inventory and the necessity for extensive storage facilities at the job site.

25) PAYMENTS TO CONTRACTOR:

Payments to the contractor shall be made according to the following:

- A) Not later than the 15th day of each calendar month or as specified in the Supplemental General Conditions, Section 01001, the Owner shall make a progress payment to the contractor on the basis of a duly certified approved estimate of the work performed during the preceding calendar month under this contract, but to insure the proper performance of this contract, the Owner will retain a portion of each estimate until final completion and acceptance of all work covered by this contract in accordance with the following:
 - a) Retention of up to 10% of payment claimed until construction is complete, or as follows;
 - b) The owner may retain over ten (10%) percent retainage if the owner determines, at its discretion, that the contractor is not making satisfactory progress or there is other specific cause for such retainage.
- B) In preparing estimates, the material delivered on the site and preparatory work done may be taken into consideration.
- C) All material and work covered by partial payments shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the Owner to require the fulfillment of all the terms of the contract.
- D) Owner's Right to Withhold Certain Amounts and Make Application Thereof: The Contractor agrees that he will indemnify and save the Owner harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material, men, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this contract. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or waived. If the Contractor fails so to do, then the Owner may, after having served written notice on the Contractor, either pay unpaid bills, of which the Owner has written notice, direct, or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed in accordance with the terms of this contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor or his surety. In paying any unpaid bills of the Contractor, the Owner shall be deemed the agent of the Contractor, and any payment so made by the Owner shall be considered as a payment made under the contract by the Owner to the Contractor, and the Owner shall not be liable to the Contractor for any such payment made in good faith.

26) ACCEPTANCE OF WORK AND FINAL PAYMENT:

Before final acceptance of the work and payment to the Contractor of the percentage retained by the Owner, the following requirements shall be complied with:

- A) <u>Final Inspection</u>: Upon notice from the Contractor that his work is completed, the Engineer will make a final inspection of the work and shall notify the Contractor of all instances where his work fails to comply with the contract drawings and specifications, as well as any defects he may discover. The Contractor shall immediately make such alterations as are necessary to make the work comply with the contract drawings and specifications, and to the satisfaction of the Engineer.
- B) Operating Test: After the alterations for compliance with the contract drawings and specifications have been made, and before acceptance of the whole or any part of the work, it shall be subjected to test to determine that it is in accordance with the contract drawings and specifications. The Contractor shall maintain all work in first-class condition for a thirty (30) day operating period after the work has been completed as a whole, the final inspection has been made, and the Engineer has notified the Contractor in writing that the work has been finished to his satisfaction. The retained percentage as provided herein will not become due or payable to the Contractor until after the thirty (30) day operating period.
- C) <u>Cleaning Up</u>: Before the work is considered as complete, all rubbish and unused material due to or connected with the construction must be removed and the premises left in a condition satisfactory to the Owner. Streets, curbs, crosswalks, pavements, sidewalks, fences and other public and private property disturbed or damaged should be restored to their former condition. Final acceptance will be withheld until such work is finished.
- D) <u>Liens</u>: Final acceptance of the work will not be granted and the retained percentage will not be due or payable until the Contractor has furnished the Owner proper and satisfactory evidence under oath that all claims for labor and material employed or used in the construction of the work under this contract have been settled, and that no legal claims can be filed against the Owner for such labor or material.
- E) <u>Final Estimate</u>: Upon completion of all cleaning up, alternations and repairs required by the final inspection or operating test, the satisfactory completion of the operating test, and upon submitting proper and satisfactory evidence to the Owner that all claims have been settled, the Contractor shall then prepare his final estimate. After review and approval of the final estimate by the Engineer and the Owner, the payment shall then become due.
- 27) ACCEPTANCE OF FINAL PAYMENT AS RELEASE:

The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work. No payment, final or otherwise, shall operate to release the Contractor or his sureties from any obligations under this contract or the performance and payment bond.

28) <u>PAYMENTS BY CONTRACTOR</u>:

The contractor shall pay:

- A) For all transportation and utility services not later than the 20th day of the calendar month following that in which services are rendered
- B) For all materials, tools, and other expendable equipment to the extent of ninety (90) percent of the cost thereof not later than the 20th day of the calendar month following

that in which such materials, tools, and equipment are delivered at the site of the project, and the balance of the cost thereof not later than the 30th day following completion of that part of the work in or on which such materials, tools, and equipment are incorporated or used; and

C) To each of his subcontractors not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his subcontractors to the extent of each subcontractor's interest therein.

29) <u>INSURANCE</u>:

The Contractor shall procure and shall maintain during the life of this contract, whether such operation be by himself or by a subcontractor or anyone directly or indirectly employed by either of them, such insurance as required by statute and/or ordinance to adequately protect the Owner from any claims or damages, including bodily injury or death, which may arise from them during operations under this contract.

- A) <u>Limits of Liability</u>: Insurance shall be obtained for not less than the limits of liability as specified in Section 01001 entitled Supplemental General Conditions.
- B) <u>Certificates of Insurance</u>: The contractor shall furnish the Owner, if requested, certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of the policies. Such certificates shall contain substantially the following statement: "The insurance covered by this certificate will not be cancelled or materially altered except after 10 days written notice has been received by the Owner.

30) <u>CONTRACT SECURITY</u>:

The Contractor shall furnish a 100 percent performance bond and a 100 percent payment bond as security for the faithful performance of this contract, as security for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The performance bond and payment bond shall be in separate instruments. Before the final acceptance, each bond must be approved by the Owner.

31) ASSIGNMENTS:

The Contractor shall not assign the whole or any part of this contract or any moneys due or to become due hereunder without written consent of the Owner. In case the Contractor assigns all or any part of any moneys due or to become due under this contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to the Contractor shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for the performance of the work called for in this contract.

32) MUTUAL RESPONSIBILITY OF CONTRACTORS:

If through acts of neglect on the part of the Contractor, any other contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration. If such other contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

33) <u>SEPARATE CONTRACTS</u>:

The Contractor shall coordinate his operations with those of other contractors. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the work. The contractor, including his subcontractor, shall keep informed of the progress and the detail work of other contractors and shall notify the Engineer immediately of lack of progress or defective workmanship on the part of other contractors. Failure of a contractor to keep informed of the work progressing on the site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by him of the status of the work as being satisfactory for proper coordination with his own work.

34) SUBCONTRACTING:

Subcontracting shall comply with the following:

- A) The Contractor may utilize the services of specialty contractors on those part of the work which under normal contracting practices are performed by specialty subcontractors.
- B) The contractor shall not award any work to any subcontractor without prior written approval of the Owner, which approval will not be given until the Contractor submits to the Owner a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the Owner may require.
- C) The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons employed by him.
- D) The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and other contract documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provisions of the contract documents.
- E) Nothing contained in this contract shall create any contractual relation between any subcontractor and the Owner.

35) <u>ENGINEER'S AUTHORITY</u>:

The Engineer shall determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Engineer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any questions shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Engineer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

Interpretation of Drawings and Specifications: The engineer shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this contract and other contractors performing work for the Owner shall be adjusted and determined by the Engineer.

36) STATED ALLOWANCES:

Not applicable.

37) USE OF PREMISES AND REMOVAL OF DEBRIS:

The Contractor expressly undertakes at his own expense:

- A) To take every precaution against injuries to persons or damage to property.
- B) To store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors.
- C) To place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work.
- D) To clean up frequently all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance.
- E) Before final payment to remove all surplus material, falsework, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat, orderly condition.
- F) To effect all cutting, fitting or patching of his work required to make the same conform to the plans and specifications, and, except with the consent of the Engineer, not to cut or otherwise alter the work of any other contractor.

38) **QUANTITIES OF ESTIMATE**:

The estimated quantities of work to be done and materials to be furnished under this contract, shown in any of the documents, including the proposal, are given for use in comparing bids, and the right is especially reserved except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this contract, and such increase or diminution shall in no way vitiate this contract, nor shall any such increase or diminution give cause for claims or liability for damages.

39) RIGHTS-OF-WAY AND SUSPENSION OF WORK:

The Owner shall furnish all land and rights-of-way necessary for the carrying out of this contract and the completion of the work herein contemplated, and will use due diligence in acquiring said land and right-of-way as speedily as possible. But it is possible that all lands and right-of-way may not be obtained as herein contemplated before construction begins, in which event the Contractor shall begin his work upon such land and right-of way as the Owner may have previously acquired, and no claim for damages whatsoever will be allowed by reason of the delay in obtaining the remaining lands and right-of-way.

Should the Owner be prevented or enjoined from proceeding with the work or from authorizing its prosecution, either before or after the commencement, by reason of any litigation or by reason of its ability to procure any lands or rights-of-way for said work, the Contractor shall not be entitled to make or assert claim for damage by reason of said delay or to withdraw from the contract except by consent of the Owner; but time for completion of the work will be extended to such time as the Owner determines will compensate for the time lost by such delay, such determination to be set forth in writing.

40) GENERAL WARRANTY FOR ONE YEAR AFTER COMPLETION OF CONTRACT:

For a period of at least one year after the completion of the contract, the Contractor warrants the fitness and soundness of all work done and materials and equipment put in place under the contract, and neither the final certificate of payment nor any provision in the Contract Documents nor partial or entire occupancy of the premises by the Owner shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The contractor shall remedy any defect in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of the work, unless a longer period is specified. The Owner will give notice of observed defects with reasonable promptness.

41) NOTICE AND SERVICE THEREOF:

Any notice to any Contractor form the Owner relative to any part of this contract shall be in writing and considered delivered and the service thereof completed, when said notice is posted by registered mail to said Contractor or his authorized representative on the work, or is deposited in the regular United States Mail in a sealed, postage prepaid envelope and the receipt thereof is acknowledged by the Contractor.

42) <u>REQUIRED PROVISIONS DEEMED INSERTED</u>:

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein, and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.

43) PROTECTION OF LIVES AND HEALTH:

In order to protect the lives and health of his employees under the contract, the Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by the Associated General Contractors of America, Inc., and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the contract. The Contractor alone shall be responsible for the safety, efficiency and adequacy of his plant, appliances and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation.

44) WAGES AND OVERTIME COMPENSATION:

The Contractor and each of his subcontractors shall comply with all applicable State and local laws or ordinances with respect to the hours worked by laborers and mechanics engaged in work on the project and with respect to compensation for overtime.

45) <u>PROHIBITED INTERESTS</u>:

No official of the Owner, who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction, or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer, or inspector of or for the Owner, who is authorized in such capacity

and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project shall become directly or indirectly interested personally in this contract or in any part hereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

46) <u>CONFLICTING CONDITIONS</u>:

Any provision in any of the Contract Documents which may be in conflict or inconsistent with any of the paragraphs in these General Conditions shall be void to the extent of such conflict or inconsistency.

47) PUBLIC CONVENIENCE AND PROTECTION:

The convenience and protection of the public must be provided for at all times during progress of the work. The Contractor shall be solely responsible to protect others and work from harm, conduct the work in such a manner as to insure the least practicable obstruction to the public and residents near and adjacent to the area of work. Roads and streets shall be kept open at all times or suitable detours provided. When it becomes necessary to close streets, suitable signs and barricades shall be placed adjacent to the work in proper locations and the Owner, Engineer, law enforcement agencies, fire departments, and all parties operating emergency vehicle shall be notified before the street is closed and again as it is reopened. All closed streets shall be opened at the end of each working day. Access to fire hydrants and other firefighting equipment shall be maintained at all times.

When necessary, the Contractor shall provide watchmen and lights to burn between twilight and sunrise and shall place and maintain barriers to protect the work and other from harm or damage. The Contractor shall take all necessary steps to protect life, limb and property. The Owner reserves the right to remedy any neglect on the part of the Contractor in connection with any unsafe practice or protection of work after 24 hours notice in writing and, in cases of emergency, the Owner shall have the right to remedy any neglect without previous notice. All costs incurred by the Owner in remedying neglect on the part of the Contractor shall be deducted from money due the Contractor.

SUPPLEMENTAL GENERAL CONDITIONS

1) ENUMERATION OF PLANS, SPECIFICATIONS AND ADDENDA:

The plans, specifications and addenda which form a part of this contract as set forth in Paragraph 1 of the General Conditions, Contract and Contract Documents are enumerated in the Table of Contents.

2) CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE:

As required under Paragraph 29 of the General Conditions, the Contractor shall not commence work under this contract until he has obtained all the insurance required under this paragraph and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved.

- A) <u>Special Hazards</u>: The Contractor's and his Subcontractor's Public Liability and Property Damage Insurance shall provide adequate protection against use of explosives, collapse, and underground hazards.
- B) <u>Compensation Insurances</u>: The Contractor shall procure and shall maintain during the life of this contract Workmen's Compensation Insurance. In case any such work is sublet, the Contractor shall require the Subcontractor similarly to provide Workmen's Compensation. Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Workmen's Compensation Insurance. In case any class of employees engaged in hazardous work on the project under this contract is not protected under the Workmen's Compensation Statute, the Contractor shall provide and shall cause such subcontractor to provide a Workmen's Compensation
- C) Comprehensive General Liability Insurance: The Contractor shall take out and maintain during the life of the contract such comprehensive general liability insurance as shall protect him and any subcontractor performing work covered by this Contract from claims for damage for personal injury, including accidental death, as well as from claims for property damage, which may arise from operations under this contract whether such operations are by himself or by any subcontractor or by anyone directly or indirectly employed by either of them. The amount of such insurance shall be as follows:
 - a) Bodily Injury and Personal Injury in an amount not less than \$500,000 per occurrence, and subject to a limit of not less than \$1,000,000 during a period of twelve months.
 - b) Property Damage Insurance in an amount not less than \$500,000 for anyone damage claim, and in an aggregate amount up to \$1,000,000 during a twelve month period.

3) <u>COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE</u>:

- A) For bodily injury, including accidental death to anyone person, in an amount not less than \$200,000 and with a limit of not less than \$500,000 on account of one accident.
- B) For property damage in an amount not less than \$150,000 per accident.
- 4) BROAD FORM BLANKET CONTRACTUAL LIABILITY INSURANCE:

- A) For bodily injury in an amount not less than \$500,000 per occurrence and not less than \$ 1,000,000 during a period of twelve months.
- B) For property damage in an amount not less than \$150,000 per occurrence and not less than \$300,000 during a period of twelve months.
- C) The Contractor shall indemnify the Owner and the Engineer as follows:
 - a) The Contractor will indemnify and hold harmless the Owner and the Engineer and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the work, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, or taking of property, including the loss of use resulting there from; and is caused in whole or part by any negligent or willful act or omission of the Contractor and Subcontractor, anyone directly or indirectly employed by any of them or anyone of whose acts any of them may be liable
 - b) In any and all claims against the Owner or the Engineer, or any of their agents or employees, by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount of type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefits acts.
 - c) The obligation of the Contractor under this paragraph shall not extend to the liability of the Engineer, his agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications.
 - d) <u>Owner's Protective Liability Insurance</u>: Issued in the name of the Owner for liability and property damage under 3 (a) and 3 (b) above, in the same amounts as stipulated for the Contractor.
 - e) <u>"All Risks" Builders Risk Insurance</u>: For the full contract value of the insurable portions of the Work.
 - f) <u>Flood Insurance</u>: The Contractor is required to carry flood insurance for projects located in designated flood hazard areas in which Federal Flood Insurance is available.
 - g) <u>Proof of Coverage of Insurance</u>: The Contractor shall furnish the Owner with a certificate showing satisfactory proof of carriage of the insurance required prior to commencing work on his contract.
 - h) <u>Scope of Insurance</u>: The insurance required under subparagraphs 2,3,4,5, and 7 hereof shall provide adequate protection for the Contractor and his Subcontractors, respectively, as well as the Owner, against damage claims which may arise from operations under this Contract, whether such operations be by the insured or by anyone directly or indirectly employed by him.

5) <u>ABBREVIATIONS AND DEFINITIONS</u>:

- A) Abbreviations used in these SPECIFICATIONS refer to the following:
 - a) <u>OWNER</u>: CITY OF CLEMSON
 - b) ENGINEER: CITY OF CLEMSON

B) Definitions: Wherever in the specifications or upon the drawings the words "directed", "required", "permitted", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation or prescription of the Owner is intended; and similarly, the words "approved", "acceptable", "satisfactory", or words of like import shall mean approved by, or acceptable to, or satisfactory to the Owner, unless otherwise expressly stated.

6) <u>PHOTOGRAPHS OF PROJECT</u>:

The Owner will photograph all rights-of-ways after awarding the project.

7) <u>SCHEDULE OF OCCUPATIONAL CLASSIFICATIONS AND MINIMUM HOURLY WAGE</u> <u>RATES</u>:

Not applicable.

8) NOTICE AND SERVICER THEREOF:

All papers required to be delivered to the Owner shall, unless otherwise specified in writing to the Contractor, be delivered to the Owner's representative as indicated below, and any notice to or demand upon the Owner shall be sufficiently given if delivered to the office of said representative, or if deposited in the United States Mail, in a sealed postage prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to the Owner's representative as indicated below, or to such other representative of the Owner, or to such other address as the Owner may subsequently specify in writing to the Contractor for such purposes. The Owner's representative is as follows:

Mr. Nathan Hinkle City of Clemson 1250 Tiger Boulevard, Suite 5 Clemson, SC 29631

9) <u>CORRELATION OF PLANS AND SPECIFICATIONS</u>:

The contract, plans and specifications are to be interpreted as mutually explanatory or supplementary, and therefore any features shown in one and not in the other shall have the same force and effect as if shown by both, and shall be fully executed. Prior to execution of the work, the Contractor shall check all drawings and specifications, and shall immediately report to the Engineer all errors, discrepancies, conflicts and omissions discovered therein. All such errors, discrepancies, conflicts and omissions will be adjusted by the Engineer, by the Engineer, and adjustment by the Contractor without prior approval shall be at his own risk. The settlement of any complications arising from such adjustments shall be made by the Contractor at his own expense and to the satisfaction of the Owner.

10) <u>OWNERSHIP OF DRAWINGS</u>:

- A) *All* drawings, specifications and memoranda relating to the work are the property of the Owner and are to be carefully used and returned to the Owner upon completion or cessation of the work from any cause.
- B) Contract Documents to be Furnished: Three (3) sets of specifications and plans will be furnished the Contractor without charge. Additional sets can be secured from the

Engineer upon request at cost of reproduction. The Contractor shall have available on the project site at all times one (1) copy of each of said plans and specifications.

11) ORDER OF WORK:

The prosecution, order or sequence of the work shall be as approved by the Engineer, which approval, however, shall in no way affect the responsibility of the Contractor.

12) <u>PHYSICAL DATA</u>:

The drawings, which accompany and form a part of the contract, have been prepared on the basis of surveys and inspections of the site, and are intended to present an essentially accurate indication of the physical conditions at the site. However, this shall not relieve the Contractor of the necessity for familiarizing himself with physical conditions at the site, and any discrepancies found in the drawings shall not be grounds for claims by the Contractor against the Owner, or for non-performance of work specifically provided for under the Contract.

13) ORGANIZATION, PLANT AND PROGRESS:

The following is supplemental to Paragraph 16 of the General Conditions:

- A) The Contractor shall give his personal superintendence to the work, or shall have a competent superintendent with authority to act for him, to the satisfaction of the Engineer, on the job at all times during the progress of the work.
- B) The Contractor shall employ an ample force of properly experienced men and provide construction plant properly adapted to the work and of sufficient capacity and efficiency to accomplish the work in a safe .and workmanlike manner at a rate of progress satisfactory to the Owner. All plants shall be maintained in good working order and provision shall be made for immediate emergency repairs. No reduction in the capacity of the plant employed on the work shall be made except by written permission of the Owner. The measure of the capacity of the plant shall be its actual performance on the work to which these specifications apply. Award of this contract shall not be construed as a guaranty by the Owner listed by the Contractor for use on this contract is adequate for the performance of the work.
- C) Should the Contractor fail to maintain a rate of progress which, in the opinion of the Owner, will complete work within the time limit specified, the Owner may require that additional men working, if necessary, during additional periods or shifts, or additional plant, or both, be placed on the work; or a reorganization of plant layout be effected in order that the progress of the work be brought up to schedule and so maintained. Should the Contractor refuse or neglect so to increase the number of men, working period, or plant, or to reorganize the plant layout in the manner satisfactory to the Owner, the latter may proceed under the provisions of the Contract to rectify the conditions.

14) <u>SUPERVISION AND INSPECTION</u>:

A) The Owner shall require inspection by the Engineer to insure that construction conforms with the approved plans and specifications. The work shall be conducted under the general direction of the Engineer and will be inspected periodically by inspectors appointed by him. The inspectors will keep a record of work done and see that the location and limit marks are kept in proper order, but the presence of the inspectors shall not relieve the Contractor or his responsible agent of responsibility for the proper execution of the work.

- B) The Contractor will be required to furnish at his expense such labor, organization and materials which form a part of the ordinary and usual equipment and crew of the Contractor as may be reasonably necessary in inspecting and supervising the work. Should the Contractor refuse, neglect or delay compliance with this requirement, the specified facilities may be furnished and maintained by the Owner and the cost thereof will be deducted from any amounts due, or to become due, the Contractor. Except as specified in this paragraph, or otherwise provided for in these specifications, all expenses of supervision and inspection will be borne by the Contractor.
- C) It is understood that any instruction or decision given by the Engineer is to be considered the instruction or decision of the Owner, in all cases where, under the terms of this contract, decision rests with the Engineer.
- D) The work shall be entirely under the control of the Engineer and Owner, and he or his authorized representative shall have access to same at all times. The Engineer may require the Contractor to dismiss such employees as he deems to be incompetent or careless.

15) STANDARD TESTS, QUALITY AND GUARANTEES:

Standard tests, quality and guarantees shall comply with the following:

- A) All materials, supplies and parts and assemblies thereof, entering into the work to be performed under these specifications, shall be tested as specified herein or otherwise required, in conformity with the contract and according to the best modern approved methods for the particular type and class of work.
- B) Unless waived in writing by the Engineer, all tests and trials shall be made in the presence of duly authorized representative of the Engineer. When the presence of the inspector is so waived, sworn statements in duplicate of the tests made and results thereof shall be furnished to the Engineer by the Contractor as soon as possible after completion of tests.
- C) Unless otherwise authorized, directed or specified, where standard published specifications of recognized authorities and organizations are mentioned, the latest revision of such specification current at the time when the work is executed shall govern.
- D) All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. The Owner will pay for all laboratory inspection service as part of the contract.
- E) Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.
- F) In accordance with the Contract, all materials, parts and equipment furnished and incorporated in the work shall be high grade, free from defects and imperfections, of recent manufacture and unused. Workmanship shall be of the highest grade and in accordance with the best modern standard practice.

16) STANDARD PRODUCTS:

All materials, supplied and articles furnished shall, wherever specified and otherwise wherever practicable, be the standard products of recognized, reputable manufacturers. The standard products of manufacturers other than those specified will be accepted when it is proven to the

satisfaction of the Engineer, in accordance with the Contract, that they are equal in strength, durability, usefulness and convenience for the purpose intended. Any changes required in the details and dimensions indicated on the drawings, or the substitution of standard products other than those provided for, shall be properly made as approved by the Engineer and at the expense of the Contractor.

17) WORK ON HIGHWAY RIGHT-OF-WAY:

The Contractor shall not begin work on any right-of-way of the State, County, or City Highway Department until all required permits have been secured and the Highway Department notified by the Contractor that work is beginning. The Contractor shall conform to all requirements of the respective highway department and shall be responsible for contacting all Highway Departments to determine all requirements for the work to be done.

The Contractor shall provide a full-time flagman at all times that work is in progress for the purpose of warning and directing traffic. Proper warning signs shall be placed at each end of the area while work is in progress and shall remain in place until completion of the work. The signs shall be maintained by the Contractor at all times and shall be placed at such distance from the work area so that sufficient warning is given to oncoming traffic. All signs shall be properly lighted at night and shall conform to the latest S.C. manual on traffic control devices for streets and highways (Latest edition).

All open cuts in highway rights-of-way shall be immediately backfilled and all work to repair pavement completed immediately. All pavement cuts are to be saw cut in a straight line. All ragged and broken edges of pavement are to be recut so as to provide a smooth and straight trench line prior to repaving. All damage to adjacent pavement caused by construction operations is to be repaired at the direction of and to the satisfaction of the respective highway departments have jurisdiction over the highway's rights-of-ways. This repair work shall be done by the Contractor at no additional cost to the Owner.

Excavation material shall not be placed on the pavement side of the trench excavation along highways. All loose dirt and debris shall be removed from the pavement at the end of each working day. All open ditches are to be filled at the end of each working day and properly barricaded to prevent damage to persons and vehicular traffic. Equipment shall not be placed on the shoulders or edges of the roads and highways during shutdown. All shoulders of roads and highways shall be left in good and acceptable condition and all disturbed topsoil and grass shall be replaced.

UNDERGROUND DAMAGE PREVENTION

SOUTH CAROLINA AREA

1) <u>GENERAL</u>:

For work in South Carolina, the "Underground Damage Prevention Act" shall be followed to avoid damage to existing underground utilities.

- A) At the beginning of the project, the City of Clemson shall provide the contractor with names of all underground utility owners in the project area.
- B) Contractor Responsibilities:
 - a) The contractor shall, within a time frame of not less than 2 or no more than 10 working days prior to the start of excavation within any public right-of-way or private easement areas owed by a utility company, notify each utility over having underground utilities in the area to be excavated of the following information:
 - i) Name, address, and telephone number of the person serving the notice.
 - ii) Name, address, and telephone number of the company that will be performing the excavation.
 - iii) Anticipated starting date of the excavation and duration.
 - iv) Type of excavation to be conducted.
 - v) Location of the excavation.
 - vi) Whether or not explosives will be used.
 - b) If the notice is given by telephone, the contractor is required to keep an adequate record. In addition to serving notice of intent to perform excavation, the contractor shall:
 - i) Plan the excavation to avoid damage and to minimize interference with underground utilities in and near the construction area to the best of his abilities.
 - Maintain a clearance between an underground utility and the cutting edge or point of any mechanized equipment, taking into account the known limit of control of that cutting edge or point, as is reasonably required to avoid damage, and
 - iii) Provide support for the underground utilities in or near the construction area, including backfill, as may be reasonably required by the utility owner for the protection of the underground utilities.
 - c) When excavation by a contractor results in known damage to an underground utility, the owner of the underground utility must be immediately notified and the utility be given a reasonable time to repair the damage before the contractor proceeds with the excavation in the immediate area of the damage.
- C) Utility Responsibility: Once notified, each utility must, prior to the day designated by the contractor as the anticipated start date for excavation, provide the contractor with the following information to the extent such information is reflected by records in the possession of and reasonably available to the utility owner.
 - a) The location (location by the law, is defined as a strip of land not wider than the width of the utility plus 2-1/2 feet on either side) and description of all of the underground utilities which may be damaged as a result of the excavation.

- b) The location and description of all utility markers indicating the location of the underground utilities, and
- c) Any other information that would assist in locating and avoiding damage to the underground utilities, including providing temporary markings when necessary indicating the location of the underground utility in locations where permanent utility markers do not exist.
- D) If a utility company fails to respond to a contractor's notice or fails to locate properly its underground utilities, the contractor is free to proceed with the excavation. Neither the contractor nor the owner will be liable to the non-responding or improperly responding utility owner for damages to the facilities if the contractor exercises due care to protect existing underground utilities when there is evidence of their existence near the proposed excavation site. Information concerning the owners of underground utilities and designated contract person can be obtained from each county register of deeds and from any county or municipal inspection department having jurisdiction over the area where the underground utilities are located.
- E) To assist contractors and utility owners in meeting the requirements of this law, there is in South Carolina a "one call system" called "Palmetto Utilities", most major utilities with underground facilities in the state subscribe to this service. If a contractor provides the required notice to this organization, Palmetto Utilities will in turn, notify each individual member utility owner which has underground utilities in the area of the proposed excavation. At the time of notification, Palmetto Utilities can advise the contractor of its members that will be notified so individual contact can be made if necessary. For calls originating within South Carolina, Palmetto Utilities telephone number is 1-888-721-7877 or 811.

REGULATORY REQUIREMENTS

1) The following retirements of Regulatory Agencies having an interest in this project are hereby made a part of this Contract.

2) The construction of the project, including the letting of contracts in connection therewith, shall conform to the applicable requirements of State, territorial, and local laws and ordinances to the extent that such requirements do not conflict with Federal laws and this subchapter.

3) State Sales Tax: All applicable state sales tax shall be to the account of the Contractor.

4) <u>Use of chemicals</u>: All chemicals used during the project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polder, reactant or of other classification, must show approval of EPA or USDA Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

5) <u>Safety and Health Regulations</u>: The Contractor shall be solely responsible to comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54).

6) <u>Inspection by Agencies</u>: The representatives of the SC Department of Health and Environmental Control shall have access to the work wherever it is, in preparation or in progress, and the Contractor shall provide proper facilities for such access and inspection.

7) Withholding for Non-Residents shall comply with the following:

- A) Attention of non-resident contractors is invited to Part No, Act No. 855, Acts of the General Assembly of South Carolina 1958.
- B) If a non-resident contractor is the successful bidder on this project, he shall be required to post surety bond, or deposit cash or securities with the South Carolina Tax Commission in compliance with the Act. Proof of such coverage shall be filed with the City of Clemson before work is started.
- C) If the Contractor fails to comply with the requirements of the South Carolina Tax Commission, two percent (2%) of each and every payment made to the Contractor shall be retained by the City of Clemson to satisfy such requirements.

8) <u>Bypassing of Wastewater</u>: No wastewater bypassing will be permitted during constructioN unless a schedule has been approved by the City of Clemson.

9) <u>Connection to Existing Facilities</u>: No new construction shall be connected to existing facilities until directed by the City of Clemson.

PERMITS, FEES, AND RIGHTS-OF-WAY

PART 1 - GENERAL

1) <u>DESCRIPTION</u>:

Work included: This section establishes requirements pertaining to the securement and payment for licenses, utility connection fee, building permits, rights-of-way, etc. necessary for the construction of the project.

2) <u>SUBMITTALS</u>:

Submit to the City of Clemson satisfactory evidence that all necessary licenses, building permits, etc. have been secured prior to commencing the work.

PART 2 - PRODUCTS

No products are required for this work.

PART 3 - EXECUTION

- 1) <u>BUSINESS LICENSE</u>:
 - A) Determine licenses necessary to perform the work at project location.
 - B) Purchase from City of Clemson a business license for the General Contractor and all Subcontractors.
- 2) <u>BUILDING PERMITS</u>:

Secure all building permits required whether of temporary or permanent nature.

3) <u>RIGHTS-OF-WAY, UTILITY LINES</u>:

Provide necessary right-of-way or easements for construction of utility lines, whether on privately or publicly owned property as required by the City of Clemson.

REFERENCE STANDARDS

1) <u>GENERAL</u>:

DESCRIPTION: Throughout the Project Documents, reference is made to specifications and standards issued by nationally recognized professional and/or trade organizations.

- A) These referenced standards are generally identified by abbreviating the name of the organization following with the specification/standard number.
- B) Unless specifically indicated otherwise, all references to standards refer to the latest edition available at the time of the bidding.

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1) <u>DESCRIPTION</u>:

This section is the basis for payment for work to be completed under the items listed in the Bids, each amount shall include all labor, materials, tools, equipment, transportation, overhead, profit, insurance, taxes, and all other costs necessary for a complete installation and placement in service of the work. No additional compensation will be considered, except for work approved by the Owner as a change to the work as bid.

- A. <u>MOBILIZATION</u> (BID ITEM NO. 1): Mobilization shall be paid for as a lump sum amount and is to include the cost for insurance; payment and performance bonds; city business licenses & applicable permit fees; the contractor's cost for moving personnel, equipment, and temporary offices to the job site; and other incidentals incurred prior to beginning actual construction of the project..
- B. <u>EROSION CONTROL</u> (BID ITEMS NO. 2): Erosion Control shall be paid for at the unit price as a lump sum. The unit price shall include silt fence, construction entrances, inlet protection, concrete washout, staking, tie-straps, reinforcement materials, layout, trenching, installation, maintenance, replacement, repair and all other labor, materials, equipment and tools to complete the item to specification as shown on the drawings per the details. All erosion control items will be presented as a report during the weekly CEPSCI inspection, the contractor shall complete all stated items to the satisfaction of the inspector in the stated time frame unless circumstances have been discussed with the City prior.
- C. <u>CLEARING & GRUBBING</u> (BID ITEM NO. 3): Shall be paid for at the unit price as a lump sum. The unit price shall include all work associated with demolition activities, disposal of waste materials, clearing within the limits of disturbance on the drawings per the specifications.
- D. <u>TREE REMOVAL</u> (BID ITEM NO. 4): shall be paid for at the unit price of each per tree removed. This unit price includes all necessary equipment, labor and consumables required to remove the trees and stumps indicated by plans.
- E. <u>DEMOLITION</u> (BID ITEM NO. 5): Shall be paid at the unit price as a lump sum. Item shall include all work associated with the removal of existing materials and conditions to allow for the installation of proposed items, saw cutting, pavement removal, excavation, hauling to and from site, cleanup and site restoration, associated traffic control, landscaping, labor, materials and all other work included for the proper disposal of waste material.
- F. <u>HDPE STORM PIPE</u> (BID ITEM NO.6 & 7): Shall be paid for at the unit price per linear foot of pipe. The unit price will include all demolition and excavation for installation, grading & subgrade preparation, layout work, hauling to and from site, installation and backfill, shoring and safety equipment, cleanup and site restoration, landscaping and all other labor, materials and tools to complete the item to specifications and as shown on the plans.
- G. <u>PVC STORM PIPE</u> (BID ITEM NO.8 &9): Shall be paid for at the unit price per linear foot of pipe. The unit price will include all demolition and excavation for installation, grading & subgrade preparation, layout work, hauling to and from site, installation and backfill, shoring and safety equipment, cleanup and site restoration, landscaping and all

other labor, materials and tools to complete the item to specifications and as shown on the plans.

- H. <u>UNDERGROUND DETENTION (STORM)</u> (BID ITEM NO.10): Shall be paid for at the unit price as a lump sump. The unit price will include all demolition and excavation for installation, grading & subgrade preparation, layout work, hauling to and from site, installation and backfill, shoring and safety equipment, cleanup and site restoration, landscaping and all other labor, materials and tools to complete the item to specifications and as shown on the plans. This item includes all inlet and outlet control structures;
- <u>GRATE INLET <10' DEPTH (BID ITEM NO. 11)</u>: Shall be paid for at the unit price of each. The unit price will include all demolition and excavation for installation, grading and subgrade preparation, layout work, hauling to and from the site, installation and backfill, shoring and safety equipment, cleanup and site restoration, landscaping and all other labor, materials and tools to complete the item to specifications as shown on the plans.
- J. <u>AREA DRAIN (BID ITEM NO. 11)</u>: Shall be paid for at the unit price of each. The unit price will include all demolition and excavation for installation, grading and subgrade preparation, layout work, hauling to and from the site, installation and backfill, shoring and safety equipment, cleanup and site restoration, landscaping and all other labor, materials and tools to complete the item to specifications as shown on the plans.
- K. <u>SKATE PARK GRADING</u> (BID ITEM NO. 12): Shall be paid for at the unit price as a lump sum. The unit price shall include all earthwork to bring the site to proper grades, slopes and cross-sections as prescribed in the drawings to include all excavation, backfill, compaction, suitable fill soils, removal of non-suitable soils, subsurface drainage, subbase and base course materials, aggregate, site preparation and all other materials, tools and labor necessary to complete the item to specification.
- L. <u>TEMPORARY STABILIZATION</u> (BID ITEM NO. 13): Shall be paid for at the unit price per lump sum. Item shall include all work associated clean backfill materials, grading, compaction, grass seed and straw, landscaping, hydroseeding, site restoration and hauling to and from site and all other labor, tools and equipment required for the installation stabilization of the site.
- M. <u>SPOHN RANCH COORDINATION</u> (BID ITEM NO. 14): Shall be paid for at the unit price of a month. The unit price shall include all necessary coordination with Spohn Ranch for the installation of their skate park system systems. Their general conditions for the General Contractor are:
 - a. Construction Entrance, Fencing & Site Security;
 - b. Unobstructed site access, suitable in Spohn's judgement, for tractor trailers and concrete trucks to chute-deliver concrete directly at skatepark footprint;
 - c. Erosion & Sediment Control for overall project site which will include skatepark site;
 - d. Temporary access to restroom, water source, power source and dumpster within 150' of skate park footprint;
 - i. NOTE:Concrete Washout will be placed in dumpster upon completion of the concrete scope;
 - ii. NOTE: Potable water delivered via ³/₄" garden hose at 45 PSI minimum;
 - iii. NOTE: Power need is 2-4 outlets (110v). If power is not within 150', a 20amp/110v generator will work;
 - iv. NOTE: dumpster to be 20 yard, capable of taking construction debris, concrete chucks, sod, etc.;
 - e. Protection of existing infrastructure within overall project footprint; and,
 - f. Joints for paving abutting concrete placed by Spohn Ranch

END OF SECTION SECTION 01700

CONTRACT CLOSEOUT

PART 1 - GENERAL

1) <u>DESCRIPTION</u>:

Work included shall be providing compliance with the requirements of the General Conditions of these specifications for administrative procedures in closing out the project work.

2) <u>SUBSTANTIAL COMPLETION</u>:

- A) The Contractor shall notify the Engineer that, in his opinion, the total project is substantially complete. Because of having to start-up and operate units at different times, the Owner shall have beneficial use of the new work prior to the substantial completion of the total project. Substantial completion will be all units are on-line and properly operating.
- B) Upon receipt of the Contractor's notice, the Engineer shall make an inspection to determine if substantial completion is provided.
- C) If, in the Engineer's opinion, the project is not substantially complete, a written notice to the Contractor shall follow outlining reasons and deficiencies in work which comprised his decision. The Engineer's decision shall be final.
- D) Generally, substantial completion shall be defined as all units, facilities, and site work which have been properly installed or completed and have been properly functioning for not less than 30 continuous days.

3) <u>FINAL INSPECTION</u>:

The Engineer will make a final inspection for the Contractor after any and all items noted in the substantial completion inspection have been corrected. The Contractor shall notify the Engineer when a final inspection is needed. Incomplete and/or defective work shall be given to the Contractor by written notice.

4) <u>RE-INSPECTION</u>:

- A) Re-inspections required due to failure by the Contractor to make previously noted corrections will be performed by the Engineer.
- B) Re-inspections will continue until the work is acceptable to the Engineer.

5) <u>COMPLETION BY CONTRACTOR</u>:

- A) When the Engineer finds the Contractor's work acceptable, the Contractor shall be given such notice and should proceed with closeout submittals.
- B) Closeout submittals shall contain at least the following:
 - a) Project record documents.
 - b) Equipment operation and maintenance manuals and copies of start-up reports.
 - c) Warranties and bonds.
 - d) Keys and keying schedule.
 - e) Spare parts and manuals.
 - f) Evidence of payment and release liens per General Conditions.

6) <u>FINAL PAYMENT</u>:

- A) Final payment to the Contractor will be made upon completion of the previous items and others required by these specifications. A final statement shall be forwarded to the Engineer. The statement shall address:
 - a) Previous change orders.
 - b) Unit prices.
 - c) Deductions for liquidated damages.
 - d) Adjusted contract sum.
 - e) Previous payments.
 - f) Amount Due.
- B) When required, the Engineer will prepare a contract change order for adjustments not previously made.

SECTION 01720

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1) <u>DESCRIPTION</u>:

Work included:

- A) Throughout progress of the Work, maintain an accurate record of changes in the work.
- B) Upon completion of the Work, deliver the recorded changes to the City of Clemson.

2) QUALITY ASSURANCE:

- A) Delegate the responsibility for maintenance of Record Documents to one person on the Contractor's staff as approved by the City of Clemson.
- B) Accuracy of records shall be such that future search for items shown on the Project Record Documents may rely reasonably on the information provided under this Section of the Work.

3) **PRODUCT HANDLING**:

- A) Maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer to the City of Clemson.
- B) In the event of loss of recorded data, use means necessary to again secure the data to the City of Clemson's approval.
 - a) Such means shall include, if necessary in the opinion of the City of Clemson, removal and replacement of concealing materials.
 - b) In such case, provide replacements to the standards originally required by the Contract Documents.

SECTION 02221

TRENCHING, BACKFILLING FOR UTILITIES

PART 1 - GENERAL

1) <u>DESCRIPTION</u>:

Work included: Trench, backfill, and compact as specified herein and as needed for installation of underground utilities associated with the Work.

2) <u>QUALITY ASSURANCE</u>:

- A) Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B) Use equipment adequate in size, capacity, and numbers to accomplish the work in a timely manner.

3) JOB CONDITIONS:

- A) Existing Utilities:
 - a) There now exists in the construction areas, waterworks, storm drainage, sanitary sewers, street paving, gas mains, underground electricity, and other utilities.
 - Approximate location of certain underground lines and structures are shown on the plans for information only, other underground lines or structures are not shown.
 - c) Locate these and other possible unknown utility lines using electronic pipe finder, or other approved means.
 - d) Locate, excavate and expose all existing underground lines in advance of trenching operations.
 - e) The Contractor will be held responsible for the workmanlike repair of any damage done to any of these utilities in the prosecution of his work under this Section.
 - f) The Contractor shall familiarize himself with the existing conditions and be prepared to adequately care for and safeguard himself and the City of Clemson from damage.
- B) Notification of intent to excavate:
 - a) South Carolina Underground Utility Damage Prevention Act (S.C. Code Ann, 58-35-10, CT-SEQ, Supp. 1978) requires persons to ascertain the location of underground public utility property prior to excavation or demolition in certain situations. The Act also requires such persons to give timely notice of intent to excavate or demolish prior to commencing such operations. Failure to comply could subject the violator to a civil penalty of up to one thousand dollars (\$1,000) for each violation of the Act.
 - b) Notification of intent to excavate may be given by calling this toll free number: 1-800-781-7474.
- C) Protecting trees, shrubbery and lawns:

- a) Where noted by the City of Clemson, trees and shrubbery in developed areas and along the trench line shall not be disturbed unless absolutely necessary, and subject to the approval of the City of Clemson. Any such trees and shrubbery necessary to be removed shall be heeled in and replanted.
- b) Where trenches cross private property through established lawns, sod shall be cut, removed, stacked and maintained in suitable condition until replacement is approved by the City of Clemson. Topsoil underlying lawn areas shall be removed and kept separate from general excavated materials.
- D) Clearing:
 - a) Perform all clearing necessary for installation of the complete work.
 - b) Clearing shall consist of removing all trees, stumps, roots, brush and debris in the rights-of-way obtained for the Work.
 - c) All timber of merchantable size shall remain the property of the City of Clemson and shall be trimmed and cut in such lengths as directed and stacked along the edge of the right-of-way.
 - d) All other material, including trimmings from above, shall be completely disposed of in a satisfactory manner.
- E) Removing and resetting fences: Where existing fences must be removed to permit construction of utilities:
 - a) Remove such fences and, as the Work progresses, reset the fences in their original location and condition.
 - b) Provide temporary fencing or other safeguards as required to prevent stock and cattle from wandering to other lands.
- F) Restoration of disturbed areas:
 - a) Restore all areas disturbed by, during or as a result of construction activities to their existing or better condition.
 - b) Do not interpret this as requiring replacement of trees and undergrowth in undeveloped sections of the rights-of-way.
- G) Minimizing silting and bank erosion during construction: During construction, protective measures shall be taken and maintained to minimize silting and bank erosion of creeks and rivers adjacent to the work being performed during construction.
- H) Blasting:
 - a) Store all explosives in a secure manner, complying with all laws, ordinances, and regulations.
 - b) Contractor shall be responsible for damage caused by blasting operations.

PART 2 - PRODUCTS

- 1) <u>EXCAVATED MATERIALS</u>:
 - A) Perform all excavation of every description and of whatever substances encountered to depths indicated or specified.
 - B) Pile material suitable for backfilling in an orderly manner at safe distance from banks of trenches to avoid overloading and to prevent slides or cave-ins.
 - C) Remove and deposit unsuitable or excess materials as directed by the City of Clemson.
- 2) <u>BACKFILL MATERIALS</u>:

Provide from materials excavated for installation of utility:

- A) Select soil material free from organic matter and deleterious substances, containing no rocks or lumps over 2 inches in greatest dimension for backfill up to 12 inches above top of utility being covered.
- B) Do not permit rocks larger than 2 inches in greatest dimension in top 6 inches of backfill.

3) OTHER MATERIALS:

Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the City of Clemson.

PART 3 - EXECUTION

1) <u>PROCEDURES</u>:

- A) Existing Utilities:
 - a) Unless shown to be removed, protect active utility lines shown on the drawings or otherwise made known to the Contractor prior to trenching. If damaged, repair or replace immediately.
 - b) If active utility lines are encountered and are not shown on the Drawings or otherwise made known to the Contractor, promptly take necessary steps to assure that service is not interrupted.
 - c) If service is interrupted as a result of work under this Section, immediately restore service by repairing the damage utility.
 - d) If existing utilities are found to interfere with the permanent facilities being constructed under this Section, immediately notify the City of Clemson and secure his instructions.
 - e) Do not proceed with permanent relocation of utilities until written instructions are received from the City of Clemson.
- B) Locations within streets or highways:
 - a) Comply with S. C. Department of Highways and Public Transportation "Encroachment Permit" issued for the Work and local requirements, if applicable.
 - b) Take all precautions and comply with all requirements as may be necessary to protect the improvements, including barricades for protection of traffic.
 - c) Keep minimum of one lane open to traffic at all times where utility crosses street or highway.
- C) Protection of persons and property:
 - a) Barricade open holes and depressions occurring as part of the Work, and post warning lights on property adjacent to or with public access.
 - b) Operate warning lights during hours from dusk to dawn each day and as otherwise required.
 - c) Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, washout and other hazards created by operations under this Section.
- D) Dewatering:
 - Remove all water, including rainwater, encountered during trench and sub-structure work to an approved location by pumps, drains, and other approved methods.
 - b) Keep trenches and site construction area free from water.

- E) Use means necessary to prevent dust becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.
- F) Maintain access to adjacent areas at all times.

2) TRENCH EXCAVATION (UNCLASSIFIED):

- A) Remove all materials of whatever substance encountered.
- B) Where trenching occurs in existing lawns, remove turf in sections and keep damp. Replace turf upon completion of the backfilling.
- C) Open cut:
 - a) Excavate for utilities by open cut.
 - b) If conditions at the site prevent such open cut, and if approved by the City of Clemson, tunneling may be used.
 - c) Short sections of a trench may be tunneled if, in the opinion of the City of Clemson, the conductor can be installed safely and backfill can be compacted properly into such tunnel.
 - d) Remove boulders and other interfering objects, and backfill voids left by such removals.
 - e) Remove wet or otherwise unstable soil incapable of properly supporting the utility, as determined by the City of Clemson, to depth required and backfill to proper grade with stone bedding material.
 - f) Excavation for appurtenances:
 - i) Excavate for manholes and similar structures to a distance sufficient to leave at least 12" clear between outer surfaces and the embankment or shoring that may be used to hold and protect the banks.
 - ii) Overdepth excavation beyond such appurtenances that has not been directed will be considered unauthorized. Fill with sand, gravel, or lean concrete as directed by the City of Clemson.
- D) Trench to the minimum width necessary for proper installation of the utility, with sides as nearly vertical as possible. Accurately grade the bottom to provide uniform bearing for the utility.
- E) Provide sheeting and shoring necessary for protection of the Work and for the safety of personnel.
- F) Depressions:
 - a) Dig bell holes and depressions for joints after the trench has been graded. Provide uniform bearing for the pipe on prepared bottom of the trench.
 - b) Except where rock is encountered, do not excavate below the depth indicated or specified.
 - c) Where rock is encountered, excavate rock to a minimum over depth of 6" below the trench depth indicated or specified, and to provide 6 inch clearance in any horizontal direction from all parts of tale utility and appurtenances.
- G) Special requirements relating to excavation for specific types of utilities shall comply with the following:
 - a) Water distribution line:
 - i) Provide depth of cover shown or minimum cover of 36 inches, whichever is greater.
 - ii) Where minimum cover only is required, carry excavations to depths necessary to properly grade the pipe on tangents and vertical curves as directed by the City of Clemson.
 - iii) Upper portion of trench may be sloped to any width which will not cause damage to adjoining structures, utilities, pavements or private property.

- b) Sewage force mains:
 - i) Grade trenches to avoid high points, unless otherwise indicated
 - ii) Provide minimum cover of 36 inches.
 - iii) Provide minimum clearance of 6 inches between pipe walls and trench wall or sheeting and bracing lines.
- c) Electrical conduit: Provide depth of cover shown or minimum cover of 36 inches, whichever is greater. Where minimum cover only is required, carry excavations to depths necessary to properly grade the conduit on tangents and vertical curves as directed by the City of Clemson.

3) <u>BACKFILLING</u>:

- A) General:
 - a) Backfill trenches and excavations immediately after the pipes are laid, unless other protection is directed or indicated.
 - b) Select and deposit backfill materials with special reference to the future safety of the pipes.
 - c) Reopen trenches which have been improperly backfilled, to a depth as required for proper compaction. Refill and compact as specified, or otherwise correct to the approval of the City of Clemson.
 - d) Surplus material shall be disposed of as directed by the City of Clemson.
 - e) Original surface shall be restored to the approval of the City of Clemson.
- B) Lower portion of trench:
 - a) Deposit approved backfill and bedding material in layers of 6" maximum thickness, and compact with suitable tampers to the density of the adjacent soil until there is a cover of not less than 12" over utility lines.
 - b) Take special care in backfilling and bedding operations not to damage pipe and pipe coatings.
- C) Remainder of trench:
 - a) Except for special materials for pavements, backfill the remainder of the trench with material free from stones larger than 6" or 1:2 the layered thickness, whichever is smaller, in any dimension.
 - b) Deposit backfill material in layers and compact each layer to specified minimum densities.
- D) Adjacent to buildings: Mechanically compact backfill in 6 inch layers within ten feet of buildings.
- E) Under roads, streets and other; paved areas:
 - a) Mechanically tamp in six inch layers using heavy duty pneumatic tampers or equal.
 - b) Tamp each layer to a density equivalent of not less than 98 percent of an ASTM D698 proctor Curve.
 - c) Provide additional compaction by leaving the backfilled trench open to traffic while maintaining the surface with crushed stone.
 - d) Refill any settlement with crushed stone and continue such maintenance until replacement of pavement is authorized by the City of Clemson.
- F) Undeveloped areas:
 - a) Backfill in wooded, swampy or undeveloped areas shall be in 24-inch layers compacted to 85% minimum density.
 - b) Mound excavated material neatly over the ditch to provide for future settlements.
- G) Lawns, roadway shoulders and other non-traffic areas:
 - a) Backfill in 12 18 inch layers and compact to 90% minimum density.
 - b) Immediately repair any settlement that occurs.

4) EXCAVATION BY JACKING-BORING:

- A) Install casings where indicated by jacking and boring.B) Comply with Section 02780.

SECTION 02750

SITE CLEARING AND EROSION CONTROL

PART 1 - GENERAL

1) <u>RELATED DOCUMENTS</u>:

Drawings and general provisions of the contract, including General and Supplementary Conditions apply to this section.

2) <u>SUMMARY</u>:

This section includes the following:

- a) Protecting existing vegetation to remain
- b) Removing existing existing vegetation
- c) Clearing and grubbing
- d) Stripping and removing topsoil
- e) Removing above-grade and below-grade site improvements
- f) Temporary erosion and sedimentation control measures

3) <u>DEFINITIONS</u>:

- A) Topsoil: Natural or cultivated surface-soil layer containing any of the following properties:
 - a) organic matter and sand, silt, and clay particles
 - b) friable, pervious and black or a darker shade of brown, gray or red then underlying subsoil
 - c) reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter
 - d) free of subsoil and weeds, roots, toxic materials, or other non-soil materials
- B) Tree Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees unless otherwise indicated.

4) <u>MATERIAL OWNERSHIP</u>:

Except for stripped topsoil to be stockpiled on site or other materials indicated to remain on the Owner's property, cleared materials shall become the contractor's property and shall be removed from the project site.

5) <u>SUBMITTALS</u>:

Photographs or videotape, sufficiently detailed or existing conditions of trees and plantings, adjoining construction and site improvements that might be misconstrued as damage caused by site clearing

6) QUALITY ASSURANCE:

Conform to requirements of all authorities having jurisdiction. Note: Where conflicts exist between the requirements of the contract documents and those of authorities having jurisdiction, the higher quality or more restrictive requirement shall apply.

7) <u>PROJECT CONDITIONS</u>:

- A) Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - a) Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from the Owner and authorities having jurisdiction
 - b) Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction
- B) Improvements on Adjoining Property: Authority for performing site clearing indicated on property adjoining Owner's property will be obtained by Owner before award of Contract. Do not proceed with work on adjoining property until directed by the Engineer.
- C) Salvable Improvements: Carefully remove items indicated to be salvaged and store on the Owner's premises where indicated.
- D) Utility Locator Service: Notify utility locator service for the area where the Project is located before site clearing. Do not proceed with operations until existing utilities are located and clearly marked.
- E) Do not commence site clearing operations until temporary erosion and sedimentation control measures are in place.
- F) Suspend clearing operations during wet conditions unless otherwise directed by the Engineer.

PART 2 - PRODUCTS

1) <u>SOIL MATERIALS</u>:

Satisfactory Soils: ASTM D 2487 Soil Classification Groups GW, GP, GM, SW, SP and SM, AASHTO M145 Soil Classification Groups A-1, A-2-4, A-2-5 and A-3 or a combination of of these groups. Free from rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation and other deleterious materials. Note: Obtain approved borrow soil materials off-site when satisfactory soil materials are not available on-site.

2) EROSION CONTROL MATERIALS:

- A) Silt Fence Geotextile: Woven geotextile fabric, manufactured for silt fence applications, made from polyolefins or polyesters, with elongation less than 20 percent, complying with AASHTO M 288 and the following, measured per test methods reference:
 - a) Grab Tensile Strength: 100 lb-f; ASTM D 4632
 - b) Permittivity: 0.05 per second (min): ASTM D 4491
 - c) UV Stability: 70 percent after 500 hours of exposure; ASTM D 4355
- B) Silt Fence Post: Steel, either integrally manufactured with the silt fence as part of a complete system or separately provided. Where separately provided, the following shall apply:
 - a) Steel Posts:
 - i) T or U cross-sectional shape
 - ii) Minimum weight: 1.3 lbs / foot
 - iii) Minimum length: 5 feet
 - iv) Shall have projections to aid in fastening wire of fabric
 - v) Shall have a metal placate welded near the bottom, such that, when driven to proper depth it will be below ground and aid stability
 - b) Fasteners: Galvanized wire or other fasteners as required for a secure installation.
 - c) Spacing: 6 feet on center (maximum).
- C) Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters, with elongation less than 50 percent, complying with AASHTO M 288 and the following, measured per test methods referenced:
 - a) Survivability: Class 2; SCDOT Standard Specifications
 - b) Grab Tensile Strength: 200 lb-f; ASTM D 4632
 - c) Sewn Seam Strength: 180 lb-f; ASTM D 4632
 - d) Puncture Strength: 80 lb-f; ASTM D 4833
 - e) Apparent Opening Size: No. 60 sieve (max); ASTM D 4751
 - f) Permittivity: 0.1 per second (min); ASTM D 4491
 - g) UV Stability: 50 percent after 500 hours exposure: ASTM D 4355
- D) Woven Wire Fabric: ASTM A 116, Class 1, wire and opening sizes indicated.
- E) Erosion Control Aggregate: Naturally or artificially graded mixture of crushed gravel or stone, in accordance with the gradation requirements indicated on the Drawings and the material requirements of the SC Department of Transportation Standard Specifications for Highway Construction. Note: Material shall be free of shale, clay, friable material, debris, waste, frozen materials, vegetation, organic material or other deleterious matter.

3) TREE PROTECTION MATERIALS:

- A) Fence Materials: Orange polypropylene safety mesh, as indicated. Minimum weight of 16 lbs / 4 foot x 100 foot roll.
- B) Metal Posts and Rails: Round cold-formed, electric-resistance-welded, steel pipe or tubing, with minimum yield strength of 45,000 PSI and with outside dimension, with minimum wall thickness and weight complying with ASTM F 761 for the following fence height and strength and stiffness requirements:
 - a) Fence Height: 4 feet
 - b) Duty Rating: Medium (minimum)
 - c) Tube or Pipe Diameter and Thickness: Per ASTM F 761

PART 3 - EXECUTION

1) <u>PREPARATION</u>:

- A) Protect and maintain benchmarks and survey control points from disturbance during construction.
- B) Locate and clearly flag existing utilities, trees and vegetation to remain or to be relocated.
- C) Protect existing site improvements to remain from damage during construction. Note: Restore damaged improvements to their original condition, as acceptable to the Owner.

2) <u>TEMPORARY EROSION AND SEDIMENTATION CONTROL</u>:

- A) Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to the Stormwater Pollution Prevention Plan (SWPPP), specific to the site that complies with EPA 832/R-92-005 or the requirements of authorities having jurisdiction, whichever is more stringent.
- B) Inspect, repair and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established or final stabilization has been achieved.
- C) When directed by the Engineer, remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3) <u>TREE PROTECTION</u>:

- A) Erect and maintain temporary fencing around tree protection zones before starting site clearing. Remove the fence when construction is complete.
 - a) Do not store construction materials, debris or excavated material within the fenced area.
 - b) Do not permit vehicles, equipment or foot traffic within fenced the area.
 - c) Maintain the fenced area free of weeds and trash.
- B) Do not excavate within tree protection zones, unless otherwise indicated.
- C) Where excavation for new construction is required within tree protection zones, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks, comb soil to expose roots and cleanly cut roots as close to excavation as possible, per the recommendations of a horticulturist or arborist.
- D) Repair or replace trees and vegetation indicated to remain that are damaged by construction operations in a manner approved by the Engineer.
 - Employ an arborist or horticulturist, licensed in the jurisdiction where the Project is located, to submit details of proposed repairs and to repair damage to trees and shrubs.
 - b) Replace trees that cannot be repaired and restored to full-growth status, as determined by the Engineer.

4) <u>UTILITIES</u>:

Existing Utilities: Do not interrupt utilities serving facilities occupied by the Owner or others unless permitted under the following conditions and then only after arranging to provided temporary utility services according to the requirements indicated:

- a) Notify Owner and Engineer and operating utility not less than two days in advance of proposed utility interruptions
- b) Do not proceed with utility interruptions without the permission of all the parties noted above.

5) <u>CLEARING AND GRUBBING</u>:

- A) Remove obstructions, trees, shrubs, grass and other vegetation to permit installation of new construction.
 - a) Do not remove trees, shrubs and other vegetation indicated to remain or to be relocated.
 - b) Cut minor roots and branches of trees indicated to remain in a clean and careful manner where such roots and branches obstruct installation of new construction.
 - c) Completely remove stumps and roots greater than 1" in diameter, obstructions and debris extending to a depth of 24 inches below exposed subgrade.
 - d) Use only hand methods for grubbing within tree protection zone
- B) Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated and is to be performed immediately. Do not leave depressions overnight. Note: Place fill material in horizontal layers not exceeding a loose depth of greater than 8 inches and compact each later to a density equal to adjacent original ground.

6) <u>TOPSOIL STRIPPING</u>:

A) Remove sod and grass before stripping topsoil.

- B) Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials. Note: Remove subsoil and non-soil materials from topsoil, including trash, debris, weeds, roots and other waste materials.
- C) Dispose of topsoil as specified for surplus soil material in disposal article below, unless otherwise directed by the Engineer.

7) <u>SITE IMPROVEMENTS</u>:

- A) Remove existing above-grade and below-grade improvements and as necessary to facilitate new construction.
- B) Remove slabs, paving, curbs, gutters and aggregate base as indicated.
 - a) Unless existing full-depth joins coincide within line of demolition, neatly saw-cut length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically and in straight lines.
 - b) Paint cut ends of steel reinforcement in concrete to remain to prevent corrosion.

8) <u>DISPOSAL</u>:

Disposal: Remove surplus material, unsuitable topsoil, obstructions, demolished materials and waste materials including trash and debris and legally dispose of them off of the Owner's property.

- a) Do not burn or chip demolished or waste materials on Owner's property.
- b) Separate recyclable materials produced during site clearing from other non-recyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.

SECTION 2750.4

Tree Removal Specifications

- DESCRIPTION The contractor shall furnish all necessary supervision, labor, vehicles nd equipment capable of effective and efficient removal of specified trees. In addition, the contractor shall maintain on site at all times work is being performed, a site supervisor who represents the contractor and can adequately communicate in English, both orally and in writing.
- 2) EQUIPMENT The equipment used shall be specified by the contractor and the contractor must describe equipment to be assigned to the project. The contractor shall plan and prepare for the use and positioning of equipment as to accomplish the safe, effective and efficient removal of trees and sections of trees while not damaging improved property. Whenever any tree, or large tree sections, being removed may endanger people or property, an adequate area shall be cordoned off with tape or rope and clearly marked to prohibit access by the public or other unauthorized persons.
- 3) UTILITIES The contractor is responsible for contacting utility companies to obtain clearance/location of utilities in any tree removal areas
- 4) TREE REMOVAL The work will consist of removal of trees specified by the city of Clemson. All tree trimming and removal will be done in accordance with the National Arborists Association Standards for health and safety. Removal of trees will consist of clearing of logs, branches, limbs and brush and the area to be swept clean of all tree debris after completion of work on site. Ensure that the tree is removed to be at an elevation equal the ground line elevation. The tree lawn and turf area shall be left in a "lawn raked clean" condition upon completion of each day. Sidewalks, curbs, gutters and pavement areas will be left in a "broom cleaned" condition upon completion of work each day.
 - a) SPECIFICATIONS Note: Bidders shall be required to self-perform the required tree removals under this Scope of Work. The City of Clemson area map is provided as reference, it is the responsibility of the Bidder to inspect the Area they are bidding on to arrive at a clear understanding of the conditions to be encountered, the difficulties involved, and all other factors affecting the work proposed under this bid request.
 - b) All trees to be removed will be marked by the City of Clemson. Trees that are not marked should not be removed. In the event a tree on the Contractor's list is removed by the City prior to the Contractor's removal, the City will not provide an alternate tree of comparable size within the Area for removal by the Contractor.
 - c) Trees must be removed using acceptable industry practices for removal, including provisions outlined in ANSI A-300 and Z133 standards. Contractor(s) should expect that it might be necessary to climb trees to perform the tree removal for this specification. Extreme care shall be taken so as to prevent limbs, branches, and trunks from falling and creating damage to adjacent homes, driveways, sidewalks, streets and other property, both public and private.
 - d) Limbs and branches larger than four (4) inches in diameter shall be lowered to the ground through the use of ropes or other mechanical device.
 - e) Limbs and branches larger than four (4) inches in diameter shall be lowered to the ground through the use of ropes or other mechanical device.

- f) The Contractor is expected to follow City of Clemson ordinances and laws including noise and traffic control.
- g) It is the Contractors' responsibility to repair any damages to improved property including sidewalks, roads, drives, structures, lawn, landscaping, trees, fencing and other improvements. Ruts, divots and holes in the lawn and landscape (including HWY rights-of-ways) areas caused by removal operations are to be repaired, including reseeding with a similar grass. This does not include the gravel path along the project.
- h) The bidder will be responsible to pay for the disposal of all wood waste generated from the tree removals. The bidder may chip all wood waste on site provided it is spread evenly as to not create a future issue.
- All safety standards of OSHA 29 CFR 1094, ANSI Z133, and ANSI A300 shall be followed. The Contractor(s) is expected to follow safety precautions as outlined in ANSI Z133 section 5 - Electrical Hazards, including but not limited to:
 - If the minimal approach distance cannot be maintained during removal operations, electrical system owner/operator shall be advised before any work is performed in proximity to energized electrical conductors. The Contractor(s) is also responsible for notifying the utility companies as to when service can be restored and to cooperate with the utility companies to ensure service is restored prior to night fall each day.
 - ii) Only qualified line-clearance arborists or trainees shall be assigned to work where an electrical hazard exists.
 - iii) If the utility company must remedy a hazard before tree work can commence, the Contractor shall notify the City to establish a work plan and scheduling.

SECTION 02840

EARTH MOVING

PART 1 - GENERAL

1) <u>RELATED DOCUMENTS</u>:

Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this section.

2) <u>SUMMARY</u>:

This section includes the following:

- A) Preparing subgrades for slabs-on-grade, walks, pavements, lawns and grasses and exterior plants
- B) Excavating and backfilling for building and structures.
- C) Base course for concrete walks and pavements
- D) Base course for asphalt paving
- E) Subsurface drainage backfill for walls and trenches

3) <u>DEFINITIONS</u>:

- A) Backfill: Soil material or controlled low-strength material used to fill an excavation.
- B) Base Course: Course placed between the subgrade and paving materials.
- C) Bedding Course: Course placed over the excavated subgrade in a trench before laying pipe.
- D) Borrow Soil: Satisfactory soil imported from off-site for us as fill or backfill
- E) Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
 - Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by the Engineer. Authorized additional excavation and replacement material will be paid for according to the Contract provisions for unit prices.
 - b) Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
 - c) Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by the Engineer. Unauthorized excavation, as well as remedial work directed by the Engineer, shall be without additional compensation.
- F) Fill: Soil materials used to raise existing grades
- G) Filter Aggregate: Aggregate backfill material that acts as a filter medium in subdrainage systems.
- H) Rock: Rock material in beds, ledges, unstratified masses, conglomerate deposits, and boulders of rock material that exceeds 1 cubic yards. for bulk excavation or ³/₄ cubic yards for footing, trench and pit excavation that cannot be removed by rock excavating equipment equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, ripping, or blasting when permitted:
 - a) Excavation of Footings, Trenches and Pits: Late-model, track-mounted hydraulic excavator; equipped with a 42-inch wide, maximum, short-tip-radius rock bucket; rated at not less than 138-hp flywheel power with bucket-curling force of not less

than 28,090 lb-f and stick-crowd force of not less than 18,650 lb-f; measured according to SAE J-1179.

- b) Bulk Excavation: Late-model, track-mounted loader; rated at not less than 210-hp flywheel power and developing a minimum of 48,510 lb-f breakout force with a general-purpose bare bucket; measured according to SAE J-732.
- Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- J) Subgrade: Soil surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below base course, subbase, drainage fill, or topsoil materials, as applicable.
- K) Utilities: On-site underground pipes, conduits, ducts and cables, as well as underground services within buildings.

4) <u>SUBMITTALS</u>:

- A) Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated:
 - a) Classification according to ASTM D 2487 of each on-site and borrow soil material proposed for fill and backfill
 - b) Laboratory compaction curve according to ASTM D 698 for each on-site and borrow soil material proposed for fill and backfill
- B) Pre-Excavation Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by earthwork operations. Submit before earthwork begins and periodic updates throughout construction.

5) <u>QUALITY ASSURANCE</u>:

- A) Geotechnical Test Agency Qualifications: An independent testing agency qualified according to ASTM E 329 to conduct soil materials and rock-definition testing, as documented according to ASTM D 3740 and ASTM E 548.
- B) Authorities Having Jurisdiction: Conform to requirements of all authorities having jurisdiction. Where conflicts exist between the requirements of the Contract Documents and those of authorities having jurisdiction, the higher quality or more restrictive requirement shall apply. For locations within areas of DOT jurisdiction, perform all work, testing and inspections in accordance with applicable DOT standards and procedures.

6) **PROJECT CONDITIONS**:

Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by the Engineer and then only after arranging to provide temporary utility services according to requirements indicated.

- a) Notify Engineer not less than two days in advance of proposed utility interruptions
- b) Do not proceed with utility interruptions without the Engineer's written permission
- c) Contact utility-locator service for area where project is located before excavating

PART 2 - PRODUCTS

- 1) <u>SOIL MATERIALS</u>:
 - A) General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
 - B) Satisfactory Soils: ASTM D 2487 Soil Classification Groups GW, GP, GM, SW, SP and SM, AASHTO M 145 Soil Classification Groups A-1, A-2-4, A-2-5, and A-3, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation and other deleterious matter. Note: For locations within areas of DOT jurisdiction, Satisfactory Soils shall be defined by SC DOT Standard Specifications.
 - C) Unsatisfactory Soils: ASTM D 2487 Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH and PT, AASHTO M145 Soil Classification Groups A-2-6, A-2-7, A-4, A-5, A-6, A-7 or a combination of these groups. Unsatisfactory soils also include satisfactory soils not brought to within 2 percent of optimum moisture content at time of compaction. These soils are not eligible for compensation under any Unit Price provisions for removal of unsatisfactory soil.

2) <u>AGGREGATE MATERIALS</u>:

- A) All sand and aggregate materials shall be free of shale, clay, friable material, debris, waste, frozen materials, vegetation, organic material or other deleterious matter.
- B) Aggregate materials shall not be composed of marine limestone or slag or unless specifically allowed in the individual paragraph(s) below.
- C) Graded Aggregate Base Course (GABC): Naturally or artificially graded crushed stone (macadam) or marine limestone in accordance with Section 305 of the South Carolina DOT Standard Specifications for Highway Construction
- D) Bedding Course: Naturally or artificially graded mixture of crushed gravel or stone, in accordance with the gradation requirements for Coarse Aggregate #57 as defined by the South Carolina DOT Standard Specifications for Highway Construction.
- E) Filter Aggregate: Naturally or artificially graded mixture of crushed gravel or stone, in accordance with the gradation requirements for Coarse Aggregate #57 as defined by the South Carolina DOT Standard Specifications for Highway Construction.
- F) Sand: Natural or manufactured sand in accordance with the gradation requirements for Fine Aggregate FA-10 (natural) or FA-10M (manufactured) as defined by the South Carolina DOT Standard Specifications for Highway Construction.

3) <u>GEOTEXTILES</u>:

Subsurface Drainage Textile: Nonwoven, needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:

- a) Survivability: Class 1, Type A, B or C; SCDOT Standard Specifications
- b) Grab Tensile Strength; 90 lb-f; ASTM D 4632
- c) Puncture Strength; 60 lb-f; ASTM D4833
- d) Trapezoidal Tear: 40 lb-f; ASTM D 4533
- e) Apparent Opening Size: No. 70 Sieve (max), ASTM D 4751
- f) Permittivity: 2.2 second-1 (min); ASTM D 4491
- g) UV Stability; 70 percent after 500 hours exposure; ASTM D 4355
- h) Water Flow Rate: 150 gal/min/ft²; ASTM D 4491

PART 3 - EXECUTION:

1) <u>PREPARATION</u>:

- A) Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B) Preparation of subgrade for earthwork operations including removal of vegetation, topsoil, debris, obstructions, and deleterious materials from ground surface is specified in Section titled "Site Clearing."
- C) Protect and maintain erosion and sedimentation controls, which are specified in Section titled "Site Clearing," during earthwork operations.

2) <u>DEWATERING</u>:

- A) Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades and from flooding the project site and surrounding area.
- B) Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - a) Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
 - b) Where required, install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required.
- 3) <u>EXPLOSIVES</u>:

Do not use explosives.

4) <u>EXCAVATION, GENERAL</u>:

Classified Excavation: Excavate to subgrade elevations. Material to be excavated will be classified as earth and rock. Do not excavate rock until it has been classified and cross sectioned by the Engineer, based on recommendations of the Geotechnical Testing Agency. The Contract Sum will be adjusted for rock excavation according to the unit prices included in the Contract Documents. Changes in the contract time may be authorized for rock excavation.

- a) If excavated materials intended for fill and backfill include unsatisfactory soil materials or rock, replace with satisfactory soil materials. The Contract Sum will be adjusted for replacement of unsatisfactory soils according to the unit prices included in the contract documents.
- b) Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities and other items indicated to be removed; together with soil, boulders and other materials not classified as rock or unauthorized excavation. Intermittent drilling; blasting, if permitted; ram hammering; or ripping of material not classified as rock excavation is earth excavation.
- c) Rock excavation includes removal and disposal of rock. Remove rock to lines and subgrade elevations indicated to permit installation of permanent construction without exceeding the following dimensions:
 - i) 24 inches outside of concrete forms other than at footings
 - ii) 12 inches outside of concrete forms at footings
 - iii) 6 inches outside of the minimum required dimension of concrete cast against grade.
 - iv) Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.
 - v) 6 inches beneath bottom of concrete slabs on grade

5) EXCAVATION FOR WALKS AND PAVEMENTS:

Excavate surfaces under walks and pavements to the indicated lines, cross-sections, elevations and subgrades

6) <u>SUBGRADE INSPECTION</u>:

- A) Notify the Engineer when excavations have reached required subgrade.
- B) If the Engineer, based on the recommendations of the Geotechnical Testing Agency, determines that the unsatisfactory soil is present, continue excavation and replace with compacted satisfactory backfill materials. Authorized additional excavation and replacement material or cement modified subgrade will be paid for according to the unit prices for unsuitable backfill in the contract documents.
- C) Proof-roll subgrade below the building slabs and pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades. Unless otherwise directed by the Engineer, based on the recommendations or the Geotechnical Testing Agency, perform proof-rolls as follows:
 - a) Completely proof-roll subgrade in one direction and where dimension permit, repeating proof-rolling in direction perpendicular to the first direction. Limit vehicle speed to not more than 3 miles per hour.
 - b) Proof roll with a fully loaded, 10 wheel, tandem-axle dump truck weighing not less than 15 tons.
 - c) Excavate soft spots, unsatisfactory soils and areas of excessive pumping or rutting as determined by the Engineer, based on the recommendations of the Geotechnical Test Agency and replace with compacted backfill or fill as directed.
- D) Reconstruct subgrades damaged by freezing temperatures, frost, rain accumulated water or construction activities as directed by the Engineer, based on the recommendations of the Geotechnical Testing Agency without additional compensation.

7) UNAUTHORIZED EXCAVATION:

Fill any unauthorized excavation under foundations, wall footings, utility pipes, or other construction as directed by the Engineer, based on the recommendation of the Geotechnical Testing Agency.

8) <u>STORAGE OF SOIL MATERIALS</u>:

Stockpile borrow soil materials and excavated, satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to efficiently drain surface water. Cover or stabilize the surface to avoid erosion from precipitation or windblow.

9) <u>BACKFILL</u>:

- A) Place and backfill in excavations promptly, but not before completing the following as applicable:
 - a) Making arrangements for required testing and evaluation of subdrainage requirements by the Geotechnical Testing Agency.
 - b) Construction below finished grade including, where applicable, subdrainage, dampproofing, waterproofing and perimeter insulation.
 - c) Surveying locations of underground utilities for Record Documents.
 - d) Testing and inspection of underground utilities.
 - e) Removing trash and/or debris
 - f) Removing temporary shoring and bracing and sheeting
 - g) Installation of permanent or temporary horizontal bracing on horizontally supported walls.
- B) Place backfill on subgrades free of mud, frost, snow or ice.
- C) Comply with the requirements indicated in the paragraph below titled "Compaction of Soil Backfills and Fills"
- 10) <u>SOIL FILL</u>:
 - A) Plow, scarify, bench or break up sloped surfaces steeper than 1V:4H so fill material will bond with existing material
 - B) Place and compact fill material in layers to required elevations as follows:
 - a) Make arrangements for required testing by the Geotechnical Testing Agency as required. Do not place subsequent layers until required testing is complete and acceptable results have been obtained and documented.
 - b) Under grass, planted areas, walks, pavements, steps, ramps, building slabs, footings and foundations use satisfactory soil materials.
 - C) Place soil fill on subgrades free of mud, frost, snow or ice.
 - D) Do not place soil fill on yielding or unapproved subgrade.

11) <u>SOIL MOISTURE CONTROL</u>:

Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

- a) Do not place backfill or fill soil material on surfaces that are muddy, frozen or contain frost or ice.
- b) Remove and replace or scarify and air dry otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry density.

12) <u>COMPACTION OF SOIL BACKFILLS AND FILLS</u>:

- A) Place backfill and soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers. Note: Make arrangements for required testing by Geotechnical Testing Agency as required. Do not place subsequent layers until required testing is complete and acceptable results have been obtained and documented.
- B) Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C) Compact soil materials to not less than the following percentages of maximum dry density according to ASTM D 698:
 - a) Under structures, building slabs, steps and pavements compact each layer of backfill or fill soil material at 98 percent.
 - b) Under walkways, compact each layer of backfill or fill soil material at 95 percent.
 - c) Under lawn or unpaved areas, compact each layer of backfill or fill soil material at 90 percent.
- 13) <u>GRADING</u>:
 - A) General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross-sections, lines and elevations indicated.
 - a) Provide a smooth transition between adjacent existing grades and new grades.
 - b) Cut out soft spots, fill low spots and trim high spots to comply with required surface tolerances.
 - B) Site Grading: Slope grades to direct water away from building and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
 - a) Lawn or unpaved areas: +/- 1 inch
 - b) Walks and pavements: +/- ¹/₂ inch

14) <u>SUBSURFACE DRAINAGE</u>:

- A) Subsurface Drainage (if applicable): Specified in Section titled "Subdrainage"
- B) Make arrangements for evaluation of subsurface drainage requirements by Geotechnical Testing Agency as required
- C) If the Engineer, based on recommendations of the Geotechnical Testing Agency, determines that subsurface drainage requirements differ from those indicated in the contract documents, install revised subsurface drainage as directed.
- D) Authorized adjustments of subsurface drainage will be paid for according to the contract provisions for unit prices. If the contract does not provide unit prices for subsurface drainage, adjustment will be based on mutually acceptable pricing established prior to the initiation of the work.

15) GRADED AGGREGATE BASE COURSE (GABC):

- A) Place GABC on subgrades free of mud, frost, snow or ice.
- B) Immediately prior to placing GABC, proof-roll subgrade as directed in the Subgrade Inspection paragraph above. Do not proceed with placement of the GABC until subgrade is approved.
- C) On prepared and approved subgrade, place GABC under pavements as follows:
 - a) Make arrangements for required testing by Geotechnical Testing Agency
 - b) Where indicated, install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends
 - c) Place GABC material over subgrade under pavements as indicated
 - d) Shape GABC to required crown elevations and cross-slope grades
 - e) Place GABC 8 inches or less in compacted thickness in a single layer
 - f) Place GABC that exceeds 8 inches in compacted thickness in layers of equal thickness, with no compacted layer no more than 8 inches thick or less than 4 inches thick. Do not place subsequent layers until required testing is complete and acceptable results have been obtained and documented.
 - g) Compact GABC at optimum moisture content to required grades, lines, cross-sections and thickness to not less than 100 percent of the maximum dry density according to ASTM D 698.
- D) Shoulders: Where installation is not bordered by concrete curb, walks or alternate confinement system, place shoulders along edges of GABC to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each base layer to not less than 95 percent of maximum dry density according to ASTM D 698.

16) <u>FIELD QUALITY CONTROL</u>:

- A) Geotechnical Testing Agency: Responsible party will engage a qualified independent geotechnical engineering testing agency.
- B) Allow Geotechnical Testing Agency: to inspect and test subgrades, each fill or backfill layer and each base course layer is applicable. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.
- C) Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by the Engineer, based on recommendations of the Geotechnical Testing Agency.
- D) Geotechnical Testing Agency will test compaction of the soils and base course in place according to ASTM D 1556 or ASTM D 2922 as applicable, except for locations within areas of SCDOT jurisdiction which shall be tested according to applicable SCDOT procedures and rates. Unless otherwise indicated or required by SCDOT or other authorities having jurisdiction, tests will be performed at the following locations and frequencies:
 - a) Paving and Building Slab Areas: At subgrade, each compacted fill and backfill layer and each base course layer, at least 1 test for every 5000 sq ft or less of paved area or building slab, but in no case fewer than 3 tests.
 - b) Foundation Wall Backfill: At each compacted backfill layer, at least 1 test for each 100 feet or less of wall length but no fewer than 2 tests.

- c) Trench Backfill: At each compacted initial and final backfill layer, at least 1 test for each 300 feet or less of trench length but no fewer than 2 tests.
- E) When Geotechnical Test Agency reports that subgrades, fills, backfills, or base course have not achieved degree of compaction specified, scarify and moisten or aerate or remove and replace to depth required; recompact and retest until specified compaction is obtained.

17) <u>PROTECTION</u>:

- A) Protecting Graded Areas: Protect newly graded areas from traffic, freezing and erosion. Keep free of trash and debris.
- B) Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled or where they lose compaction due to subsequent construction operations or weather conditions. Scarify or remove and replace soil material to depth as directed by the Engineer; reshape and recompact.
- C) Where settling occurs before project correction period elapses, removed finished surfacing, backfill with additional soil material, compact and reconstruct surfacing. Restore appearance, quality and condition of finished surfacing to match adjacent work and eliminate evidence of restoration to greatest extent possible.

18) DISPOSAL OF SURPLUS AND WASTE MATERIALS:

Disposal: Unless directed otherwise to stockpile onsite, remove surplus satisfactory and unsatisfactory soil and legally dispose of it off of Owner's property. Remove waste material, trash, debris and legally dispose of it off of Owner's property.

SECTION 02850

PIPING GENERAL REQUIREMENTS

PART 1 - GENERAL

- 1. DESCRIPTION:
 - a. Work Included: The work described under this section specifies the general requirements for installation of a piping, valves and fittings to include general and yard piping, water lines, force mains, sewer lines, equipment piping, and process piping, and applies to all work where piping is installed. The work to install electrical conduit is not specified under this section. The contractor shall furnish all labor, equipment, tools, and materials necessary to perform all tasks required to properly install all pipe work as shown on the drawings and specified herein, in coordination with another work and in coordination with the required protection, relocation or connection to existing utilities. Any incidental work, material, or appurtenances not specifically shorn, but necessary for completion of the work shall be furnished by the contractor as required.
 - b. Related Work: Documents affecting work of this Section include, but are not necessarily limited to General conditions, supplementary conditions, and sections in Division 1 of these Specifications.
- 2. <u>QUALITY ASSURANCE:</u>
 - a. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.
- 3. SUBMITTALS:
 - a. Comply with pertinent provisions of Section 01340.
 - b. Product Data: Shop drawings shall be submitted on all pipe, fittings, valves, sleeves, couplings, supports, and appurtenances required for complete installation of the piping. Where material being utilized is the same as specified, the contractor shall submit shop drawings and a verification statement that all piping is as specified.
- 4. PRODUCT HANDLING:

Comply with pertinent provision of Section 01640

PART 2 - PRODUCTS

1. <u>PIPE AND FITTINGS:</u>

Materials: All piping to include valves and fittings shall be of the type and size as shown on the drawings or specified in other sections. Materials are to be new and of standard manufacture, meeting all requirements of applicable ASTM standards. Materials not specifically covered by and meeting ASTM, AWWA, and National Sanitation Foundation standards shall not be used.

PART 3 - EXECUTION

1. <u>GENERAL:</u>

Equipment Piping:All piping necessary for proper installation and operation of equipment shall be installed as required to fit the equipment provided. The Contractor shall be responsible for providing piping and support necessary for proper equipment installation and operation whether or not the required piping and pipe supports are shown on the drawings. All piping is to be properly installed and supported in accordance with equipment manufacturer's recommendations so as not to put strain on equipment connections and to prevent excessive vibration

2. INSTALLATION:

Installation: All piping shall be installed in a proper and workmanlike manner, properly protected and supported, free from leakage and meeting all requirements for inspection and testing as specified in other sections.

- a. Concrete Blocking: Concrete blocking shall be provided for all underground pressurized piping at all fittings, bends, and ends of pipe to prevent movement of pipe and fittings. Concrete shall be Class A (3000 psi). The concrete blocking shall bear on undisturbed earth in the bottom and sides of the trench and shall be equal to or greater than the dimensions shown on the drawings.
- b. Concrete Protection: Protection and encasement concrete shall be Class B and provided where shown on the drawings, or as necessary for protection of existing piping or utilities as directed by the City of Clemson.
- c. All piping is to be installed to the line, grade, and elevations shown on the plans.
 - i. Water lines, and all pressure piping is to be installed in a true line and grade and in a manner so as to prohibit the formation of high and low spots in the piping likely to trap air or gasses.
 - ii. Gravity, drainage, sewer, and sanitary piping shall be installed in a true line and with a constant grade as shown on the drawings.
 - iii. All fittings, valves, sleeves, couplings, and appurtenances are to be compatible with, and of equal pressure class as the piping being used.
- d. All piping through walls of the manholes shall be adequately supported, and caulked watertight with non-shrink grout.
- 3. TESTING:

All piping shall be pressure tested and tested for leakage. Procedures for testing are specified in other sections. All potable water lines are to be disinfected.

4. <u>CLEANUP:</u>

All piping shall be thoroughly cleaned of concrete, mortar, mud, dirt, debris, and rust prior to painting or coating. All areas of piping shall be cleaned up after installation to remove debris, and discarded and unused piping. The area of piping is to be graded smooth to drain and left in a condition satisfactory to the City of Clemson before piping shall be considered to be complete.

5. PAINTING:

All exposed metal piping is to be painted. PVC piping is to be painted only as directed by the City of Clemson.

SECTION 02950

STORM DRAINAGE PIPE, CULVERTS, and ENDS

PART 1 - General

1) <u>SUMMARY:</u>

The work under this item shall consist of furnishing and installing storm drainage pipes and relaying existing pipe of the type, size, and length called for on the Approved Drawings or as ordered, at the locations and the lines and grades designated on the Approved Drawings, or as directed by the Engineer, and in conformity with these Specifications. This item shall also include furnishing and installing storm drainage pipes in accordance with the details shown on the Approved Drawings, or as ordered. Substructures and incidental construction shall comply with the requirements of the Specifications for the various items, which constitute the completed structure. This item shall further include the furnishings and installing of pipe elbows, pipe couplers, specials of the type and size shown on the Approved Drawings, at the location, to the lines and grades designated, or as ordered by the Engineer and in conformance with these Specifications. This Item shall also include the furnishing and installing of culvert ends conforming to the details shown on the Approved Drawings or to commercial details providing equal lengths and a similar shape as approved by the Engineer and having generally comparable hydraulic characteristics.

2) <u>Materials:</u>

Pipes and culverts of the type indicated on the Approved Drawings, join sealant and materials, bedding materials, culvert ends, and elbows or specials, shall conform to the requirements of SCDOT 2007 Standard Specifications Book Section 714 and SC-M714.

3) <u>Construction Methods:</u>

Unless otherwise directed by the Engineer, all new or re-laid culverts including culverts composed of structural plates shall be installed in pipe bedding in accordance with the details as shown on the Approved Drawings and in conformance with these Specifications. Methods of excavation and backfilling shall be in conformance with SCDOT 2007 Stand Specifications Book Section 714 and SC-M-714 Section 3.3 through 3.3.14.

The placement of the pipe shall start at the downstream end and progress upstream unless otherwise approved by the Engineer. All pipes shall be carefully laid true to line and grades shown on the Approved Drawings, hubs upgrade and with the spigot ends fully entered into the adjacent hubs. Pipes and pipe arches shall be carefully jointed and firmly clamped together by approved connecting bands, which shall be properly connected before any backfill is placed. Where indicated on the Approved Drawings or directed by the Engineer, existing pipe culverts shall be taken up and re-laid or extended and renewed in the same manner as specified herein for new pipe culverts. Where shown on the Approved Drawings or directed by the Engineer, the Contractor shall connect the proposed drainage system with existing drainage structures or pipes.

4) <u>HDPE Pipe Details:</u>

a) <u>SCOPE</u>

This specification describes 4- through 60-inch (100 to 1500 mm) ADS N-12 ST IB pipe (per ASTM F2648) for use in gravity-flow land drainage applications.

b) <u>Pipe Requirements</u>

ADS N-12 ST IB pipe (per ASTM F2648) shall have a smooth interior and annular exterior corrugations.

- 4-through 60-inch (100 to 15000 mm) shall meet ASTM F2648
- Manning's "n" value for use in design shall be 0.012

c) Joint Performance

Pipe shall be joined using a bell & spigot joint meeting ASTM F2648. The joint shall be soil-tight and gaskets, when applicable, shall meet the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacture and covered with a

removable wrap to ensure the gasket is free from debris. A joint lubricant supplied by the manufacturer shall be used on the gasket and bell during assembly.

d) <u>Fittings</u>

Fittings shall conform to ASTM F 2306. Bell and spigot connections shall utilize a spun-on or welded bell and valley or saddle gasket meeting the soil-tight joint performance requirements of ASTM F2306

e) <u>Material Properties</u>

Material for pipe production shall be engineered compound of virgin and recycled high density polyethylene conforming with the minimum requirements of cell classification 424420C (ESCR Test Conditions)

- For 4- through 10-inch (100 to 250 mm) diameter, and 435420C (ESCR Test Condition B)
- For 12- through 60-inch (300 to 1500 mm) diameters, as defined and described in the latest version of ASTEM D3350, except that carbon black content should not exceed 4%. The design engineer shall verify compatibility with the overall system including structural, hydraulic, material and installation requirements for a given application.

f) Installation

Installation shall be in accordance with ASTEM D2321 and ADS recommended installation guidelines, with the exception that minimum cover in trafficked areas for 4-through 48-inch (100 to 1200 m diameters shall be one (1) foot (0.3 m) and for 60-inch (1500 mm) diameters, the minimum cover shall be two (2) feet (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1

(compacted), or Class 2 (minimum 90% SPD) material. Maximum fill heights depend on embedment material and compaction level

SECTION 03000

OPEN SPACE FINAL STABILIZATION SPECIFICATION

PART 1 - GENERAL

1) <u>RELATED DOCUMENTS</u>:

Drawings and general provisions of the contract, including open space final stabilization preparation apply to this section.

2) <u>SUMMARY</u>:

This section includes the following:

- a) Soil Materials,
- b) Acceptable seed species and/or mixes,
- c) Final Grade Requirements,
- d) Soil Amendments,
- e) Seed Bed Preparation,
- f) Seeding,
- g) Sodding,
- h) Watering requirements,
- i) Acceptance of Final Stabilization for Close-out, and
- j) Final Payment.

3) <u>DEFINITIONS</u>:

- A) The following definitions are applicable to the terms used in this section only:
 - a) Final Grade: Finish grade of soil for all disturbed areas within the project
 - b) <u>Seed Bed</u>: The first six (6) inches of soil and material below and including the soil surface.
 - c) <u>Soil Amendments</u>: Additives to the seedbed to enhance quality/fertility including but not limited too:
 - i) Topsoil, compost, granular fertilizer, lime, and Biological Growth Stimulants (BGS).
 - d) <u>Sod</u>: Sections/pieces/rolls of established turf or grasses at least one (1) inch thick, that have been adequately harvested by appropriate measures and are in good health/condition prior to being laid for stabilization.
 - e) <u>Topsoil</u>: Natural or cultivated surface-soil layer containing any of the following properties:
 - i) organic matter and sand, silt, and clay particles
 - ii) friable, pervious and black or a darker shade of brown, gray or red then underlying subsoil

- iii) reasonably free of subsoil, clay lumps, gravel, and other objects more than two (2) inches in diameter
- iv) free of subsoil and weeds, roots, toxic materials, or other non-soil materials
- f) <u>Unacceptable Seedbed Material</u>: Any material found to be unacceptable on top or within the seedbed including but not limited to:
 - i) Construction debris,
 - ii) Rock/stone greater than two (2) inches in any dimension,
 - iii) Soil clumps greater than three (3) inches in any dimension,
 - iv) Unapproved vegetation or vegetative material,
 - v) Unapproved soil additives, and
 - vi) Woody material greater than two and one-half (2 ½) inches in diameter.

5) <u>SUBMITTALS</u>:

Photographs or videotape, sufficiently detailed or existing conditions of trees and plantings, adjoining construction and site improvements that might be misconstrued as damage caused by site clearing must be taken by the Contractor and submitted to the City, before work can commence.

6) <u>QUALITY ASSURANCE</u>:

Conform to requirements of all authorities having jurisdiction. Note: Where conflicts exist between the requirements of the contract documents and those of authorities having jurisdiction, the higher quality or more restrictive requirement shall apply.

PART 2 - PRODUCTS

1) <u>SOIL MATERIALS</u>:

A) Satisfactory Soils: ASTM D 2487 Soil Classification Groups GW, GP, GM, SW, SP and SM, AASHTO M145 Soil Classification Groups A-1, A-2-4, A-2-5 and A-3 or a combination of of these groups. Free from rock or gravel larger than two (2) inches in any dimension, debris, waste, frozen materials, vegetation and other deleterious materials. Note: Obtain approved borrow soil materials off-site when satisfactory soil materials are not available on-site.

2) ACCEPTABLE SEEDS AND/OR MIXES:

- A) Use seed that conforms to all state laws and all requirements and regulations of the South Carolina Department of Agriculture (SCDA). Seeds containing species designated by the State Crop Pest Commission as a plant pest (i.e., noxious weeds) are not permitted. Use seed that is individually packaged or bagged and tagged. Each tag must clearly state:
 - a) Net weight
 - b) Botanical name

- c) Common name
- d) Variety
- e) Grower name
- f) Grower lot number
- g) Percent purity
- h) Percent germination
- i) Percent other crop seed
- j) Percent inert matter
- k) Percent weed seed (if weed seed is present, provide a list of species by botanical name)
- I) Origin
- B) The City reserves the right to test, reject, or approve all seed before seeding. Mixtures of different types of seed called for in the seeding schedule will be weighed and mixed in the proper proportions on-site in the presence of the City Engineer or a member of the City Engineer's staff.
- C) Seeding Schedule:
 - a) Unless otherwise provided, select seed from Table 1 (Permanent Cover (Perennials)).
 - b) If the seed listed in the tables is not available, the Contractor may select the most practicable alternative seed available as a substitute. The Contractor must submit data to the City Engineer showing that the substitute seed is appropriate for the specific application.
 - c) Select a minimum of two (2) seed types from Table 1 for all permanent cover based on the specific application and the availability of the seed.
 - d) If the Common Name of the seed listed in Table 1 is not available, use seed with the listed Botanical Name.

| TABLE 1: PERMANENT COVER (PERENNIALS) | | | | | | | | | | | | | | |
|--|--|------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| COMMON | BOTANICAL | RATE (lbs/ac) | Planting Dates* | | | | | | | | | | | |
| NAME | NAME NAME (| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
| TURF-TYPE GRASSES | | | | | | | | | | | | | | |
| Common Bermudagrass (Hulled) ¹ | Cynodon dactylon | 50 | | | | | | | | | | | | |
| Common Bermudagrass (Unhulled) ¹ | Cynodon dactylon | 60 | | | | | | | | | | | | |
| Centipedegrass | Eremochloa ophiuroides | 10 | | | | | | | | | | | | |
| Tall Fescue (KY-31) ² | Festuca arundinacea | 75 | | | | | | | | | | | | |
| Perennial Rye Grass³ | Lolium perrene | 15 | | | | | | | | | | | | |
| * Months shade | * Months shaded in gray represent applicable planting date | | | | | | | | | | | | | |
| ¹ Common Bermudagrass: Do NOT use Giant Bermudagrass (NK-37), Hulled = Hull Absent, Unhulled = Hull Present | | | | | | | | | | | | | | |
| Tall Fescue (KY-31): Do NOT use Tall Fescue (Lolium arundinacea) | | | | | | | | | | | | | | |
| ³ Perennial Rye | Perennial Rye Grass: Do NOT use Annual Italian Rye Grass (Lolium multiforum) | | | | | | | | | | | | | |

PART 3 - EXECUTION

1) <u>FINAL GRADE REQUIREMENTS</u>:

- A) All final grading activities should meet the following requirements:
 - a) Have positive drainage to City storm drainage systems,
 - b) Have a minimum of two (2) percent and a maximum of twenty-five (25) percent slope (unless otherwise approved on plans),
 - c) Have the seedbed prepared following the procedure outlined below, and
 - d) Not contain any of the unacceptable seedbed material defined above.
- B) Any sections of the project that develop soil rills during the stabilization process and before close-out is issued, must be graded out and the stabilization process must be restarted.
- C) The City reserves the right to inspect all final grading activities before final stabilization measures are implemented. The inspection will be performed by the City Engineer or a member of the City Engineer's staff.

2) <u>SOIL AMENDMENTS:</u>

- A) Compost:
 - a) For seedbeds that have little or no topsoil, the Contractor may furnish and place certified weed free compost on the seedbed or mix compost with the seedbed in order to ensure a good stand of grass. Refer to the current SCDOT Compost Specification (SC-M-815-3) for description, materials, and construction requirements. As directed by the City Engineer, provide compost when seedbeds are excessively nutrient deficient to the extent of requiring costly fertilizer additions and or have excessively low pH values (5.0 or lower) to the extent of requiring costly lime additions.
- B) Granular Fertilizer:
 - a) Use granular fertilizer that complies with state fertilizer laws. In a mixed fertilizer such as 10-10-10, the first number represents the minimum percent of nitrogen required, the second number represents the minimum percent of available phosphoric acid required, and the third number represents the minimum percent of water soluble potash required in the fertilizer.
 - b) Use fertilizer that has a package slip clearly stating the percentage of nitrogen, percentage of phosphoric acid, and percentage of potash along with the weight (pounds) of nitrogen, weight (pounds) of phosphoric acid, and weight (pounds) of potash. Animal by-product or municipal waste fertilizers are not acceptable under this Specification.
 - c) A soil analysis is required prior to agricultural granular fertilizer applications. The soil analysis determines the need and rate of fertilizer applications for the specific vegetation species.
 - i) This soil analysis must be submitted to the Clemson University Agricultural Service Lab or an approved equal, for analysis.
 - ii) The Contractor must submit a copy of the results to the City of Clemson before seeding and follow the recommendations for fertilizer application to the site.
 - d) Following advance preparation and placing selected material for shoulders and slopes when called for in the Contract, uniformly spread fertilizer over the designated areas. Adequately scarify all slopes subject to slides and inaccessible to power equipment. Fertilizer may be applied by approved mechanical spreaders or by hydraulic methods as a mixture of fertilizer and seed. When fertilizer is applied with combination seed and fertilizer drills, no further incorporation is necessary. Apply the fertilizer and seed together when hydraulic methods of seeding are used.
 - e) Apply all fertilizer at a rate that is within ±10% of the weight recommendation of the soil analysis. Apply fertilizer that is within ±2 percentage points of the percentage recommendation of nitrogen, percentage of phosphoric acid, and percentage of potash from the soil analysis. The Contractor may combine fertilizers of different compositions to meet the composition requirements of the soil analysis.
- C) Lime:

- a) Use solid agricultural granular lime for all permanent cover applications that are agricultural grade, standard ground limestone conforming to the current Rules, Regulations, and Standards of the Fertilizer Board of Control. These rules, regulations, and standards are promulgated and issued by the Fertilizer Board of Control at Clemson University in accordance with Section 16 of the South Carolina Liming Materials Act.
- b) Ensure that each bag has affixed in a conspicuous manner a tag or label, or in the case of bulk sales, a delivery slip showing brand or trade name, calcium carbonate equivalent, percent by weight passing prescribed U. S. Standard Sieves, and other pertinent information to identify lime as being agricultural grade, standard ground limestone.
- c) A soil analysis is required prior to agricultural granular lime applications. The soil analysis determines the need and rate of granular lime application for a given application area. Based on the results of the soil analysis, furnish granular lime to provide a long term pH adjustment.
- d) Following advance preparation and placing selected material for shoulders and slopes when called for in the Contract, uniformly spread lime over the designated areas and thoroughly mix with the soil to a depth of approximately two (2) inches. Mixing is not required when spreading lime with hydraulic methods.
- e) Adequately scarify all slopes subject to slides and inaccessible to power equipment. Lime may be applied by approved mechanical spreaders or by hydraulic methods as a mixture of lime and seed. Apply all agricultural granular lime at a rate that is within ±10% of the weight recommendation of the soil analysis.
- D) Liquid Fertilizer/Lime:
 - a) The use of liquid fertilizer and/or lime is prohibited and should not be used as a soil amendment product or technique.
- E) Biological Growth Stimulants (BGS):
 - a) Provide biological growth stimulants for all permanent cover and temporary cover by seeding applications. Use biological growth stimulants that provide an immediate seedbed adjustment to help stimulate seed germination, improve the availability of nutrients to the plant, increase the number and depth of root development, and generate robust plant growth that is more tolerant of changes in environmental conditions.
 - b) Use biological growth stimulants that:
 - i) Contain natural components that encourage nutrient uptake, nitrogen metabolism, and carbohydrates storage,
 - ii) Improve fertilizer utilization in the soil by increasing the enzymatic and microbial nutrient conversion activity,
 - iii) Improve photosynthetic production resulting in greater root mass and improved disease resistance,
 - iv) Contain components to improve nutrient and water uptake by the plant,

- v) Contain plant growth hormones which act as a stimulant to improve vegetative growth and intake of micronutrients and can reduce damage from disease and insect infestation, and
- vi) Contain components that increase biological activity in the soil to improve stress tolerance/drought resistance, reduces sodium uptake in sandy soils, provides more phosphorus availability, and increases cation exchange capacity resulting in earlier germination and better root establishment.
- vii) Provide biological growth stimulants that contain compounds such as: Humic acid (humates), Humectants, Cold water processed seaweed/kelp extract, Beneficial microbes, Cytokinins, Gibberellins, and Auxins (growth hormones).
- viii) Animal by-products or municipal waste products are not acceptable biological growth stimulants under this specification.
- ix) Provide Biological Growth Stimulants that have no germination or growth inhibiting factors and do not form a water-resistant crust that can inhibit plant growth.
- Furnish biological growth stimulants where all components are pre-packaged by the manufacturer to assure material performance and compliance with the minimum requirements in Table 2.

| Table 2: Minimum Biological Growth Stimulant Requirements | | | | | | | | |
|--|------------------------------------|--------------|--|--|--|--|--|--|
| BGS Property Test Method Required Value | | | | | | | | |
| Physical | | | | | | | | |
| | ASTM 7101 | Non Toxic | | | | | | |
| Acute Toxicity | EPA Method 2021 or EPA Method 2002 | | | | | | | |
| Performance | Performance | | | | | | | |
| Seed Germination | ASTM D73221 | 200% minimum | | | | | | |
| Plant Mass ASTM D7322 ¹ 110% minimum | | | | | | | | |
| ¹ ASTM test methods developed for Rolled Erosion Control Products (RECPs) that have been modified for comparison to control between 14 and 21 days | | | | | | | | |

3) <u>SEED BED PREPARATION</u>:

- A) Ensure that the areas to be seeded are uniform and conform to the finished grade and cross-section shown on the Plans or as otherwise directed by the City Engineer. Perform minor shaping and evening of uneven and rough areas outside of graded sections as directed by the City Engineer in order to provide for more effective erosion control and for ease of subsequent mowing operations.
- B) Loosen the seedbed (including cut slopes) to a minimum depth of three (3) inches before compost, agricultural lime, fertilizer, or seed is applied. An acceptable method of preparing the seedbed on slopes is vertically tracking the seedbed up and down the slope with proper equipment.

- C) Remove stones larger than two (2) inches in any dimension, large clods, roots, or other debris brought to the surface. Use compost as directed by the City Engineer for shoulders and slopes if good seedbed material is not located on site.
 - a) The unacceptable seedbed material may be removed by any manual or mechanical method, subject to approval by the City Engineer or staff.
 - b) It has been found that the <u>RockHound Landscape Rake</u> does a sufficient job of removing the unacceptable seedbed material and it or <u>any other equivalent equal</u> <u>is approved for use</u>.
- D) Prepare and submit a seeding plan utilizing the seeding schedule to the City Engineer for all temporary cover by seeding and permanent cover applications. The City Engineer will approve all seeding plans before temporary cover by seeding and permanent cover applications are initiated.

4) <u>SEEDING:</u>

- A) Perform seeding work during the periods and at the rates specified in the seeding tables of this Specification.
- B) Do not conduct seeding work when the ground is frozen or excessively wet.
- C) Do not conduct seeding work when the ground is excessively dry (periods of drought) unless watering is specified in the Contract.
- D) During periods of adverse conditions, temporary stabilization by mulch may be used according to this Specification.
- E) Do not attempt to seed or establish vegetation around existing tree roots. Other stabilization techniques will be required in these areas and are subject to approval by the City Engineer or members of their staff.
- F) The approved methods of seeding include but are not limited to:
 - a) Broadcast seeding,
 - b) Drilling, or
 - c) Hydroseeding.

5) <u>SODDING:</u>

- A) Laying sod is an approved method for final stabilization. All sod and sodding activities must meet the following requirements to be approved for use:
 - a) All sod pieces/rolls must be a minimum of one (1) inch thick and a maximum of three (3) inches thick,
 - b) All sod pieces/rolls must be in good health and condition and be inspected by the City Engineer, City Horticulturist, or members of their staff; before being installed.
 - c) All sod pieces/rolls must be a <u>Bermudagrass and/or Zoysia Grass</u> species/cultivar approved by the City Engineer, City Horticulturist, or a member of their staff <u>before</u> purchase,
 - d) All sod seams are minimal in width and sanded to fill the any gap in the seam, and
 - e) All sod pieces/rolls are subject to the watering requirements below and must receive a minimum of one (1) inch of water per week; either by rainfall or by receiving supplemental watering, until root establishment has occurred.

B) The City reserves the right to inspect all sod and sodding activities before, during, or after it is implemented. The inspection will be performed by the City Engineer, City Horticulturist, or members of their staff.

6) <u>WATERING REQUIREMENTS</u>:

- A) Watering for vegetation consists of applying water to seeded areas to enhance germination and applying water to germinated areas to enhance root growth. When directed by the Engineer, use watering for vegetation to establish a stand of cover. When watering, follow the following guidelines:
 - a) Immediately after seeding and/or sodding:
 - i) Keep the soil moist but not excessively wet until the seed has germinated or root establishment for sod.
 - ii) Water a minimum of three (3) days a week for two (2) weeks preferably watering two (2) or three (3) times a day in small quantities.
 - iii) Use fine spray and low pressure to avoid soil wash and to prevent uncovering buried seeds.
 - b) After emergence:
 - Apply one (1) inch of water per irrigation event. (Note: 1-acre-inch = 27,154 gallons. This is the volume of water necessary to cover one (1) acre one (1) inch deep.)
 - ii) During summer, water two (2) to three (3) days per week.
 - iii) During winter, water once every ten (10) to fourteen (14) days.
 - iv) If rainfall occurs, suspend watering according to rainfall amount.
 - v) Never apply at a rate faster than can be absorbed by the soil.
 - vi) When applicable, water during early morning hours or early evening hours.
 - vii) Do not water when rain is forecasted for the area.

7) ACCEPTANCE OF FINAL STABILIZATION FOR CLOSE-OUT:

- A) Before acceptance of permanent cover, the Contractor will be required to produce a uniform perennial vegetative cover with a density of 70% of each square yard of the seeded/sodded area. A well developed root system must be established to sufficiently survive dry periods and winter weather and be capable of reestablishment in the spring. Using the seed specified in the seeding tables, the Contractor will create a seeding plan and determine all rates of application necessary to produce the required stand of grass and follow the application procedures as specified herein.
- B) This percentage of vegetative cover will be determined by the City Engineer or a member of the City Engineer's staff using methods including but not limited to:
 - a) Visual estimation,
 - b) Quadrat technique(s), and/or
 - c) The use of imagery; both aerial and non-aerial, and technology to determine percent vegetative coverage.
- 8) <u>FINAL PAYMENT:</u>

- A) Final payment to the Contractor will be made upon completion of the previous items and others required by these specifications. A final statement shall be forwarded to the Engineer. The statement shall address:
 - a) Previous change orders.
 - b) Unit prices.
 - c) Deductions for liquidated damages.
 - d) Adjusted contract sum.
 - e) Previous payments.
 - f) Amount Due.
- B) When required, the Engineer will prepare a contract change order for adjustments not previously made.
- C) The payment for this specification shall be based on an all inclusive price per acre (ac) basis except for sodding.
- D) Sod shall be based on a price per square foot, when used.

END OF SECTION

SECTION IV- REQUIRED FORMS

ITB 2025-01-002

Clemson Park Phase 1



Page 117 of 132



Invitation To Bid ITB 2025-01-002 Clemson Park Phase 1 Issue Date: January 17, 2025

BIDDER'S CHECKLIST

Company Name_____

-

Please indicate you have completed the following documentation and submit them in the following order.

| | ITEM DESCRIPTION | | | | |
|-------|--|--|--|--|--|
| Check | Bidders Checklist Bidders Declaration Bid Form Bid Bond SC Immigration Form Certificate of Non-Discrimination Non-Collusion Affidavit SC Ethics in Public Contracting Affidavit | | | | |
| | □ W9 □ SC I-312 | | | | |
| | <u> </u> | | | | |
| | | | | | |

Authorized Signature

Date

Printed Name

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



Title

Email

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

Clemson Park Phase 1 ITB 2025-01-002

BIDDERS DECLARATION

The bidder understands, agrees and warrants:

That the bidder has carefully read and fully understands the full scope of the requirements.

That the bidder has the capability to successfully undertake and complete the responsibilities and obligations in said specifications.

That this bid may be withdrawn by requesting such withdrawal in writing at any time prior to **February 7, 2025 2:00 PM.** but may not be withdrawn after such date and time.

That the City of Clemson reserves the right to reject any or all bids and to accept that bid which will, in its opinion, best serve the public interest. The City of Clemson reserves the right to waive any technicalities and formalities in the bidding.

That by submission of this bid the bidder acknowledges that the City of Clemson has the right to make any inquiry or investigation it deems appropriate to substantiate or supplement information supplied by the bidder.

BIDDER:

Name

Title

Name

Title

Clemson Park Phase 1 ITB 2025-01-002

CERTIFICATE OF NON-DISCRIMINATION

In connection with the performance of work under this contract, the bidder agrees as follows:

The bidder agrees not to discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, ancestry or disability. The vendor shall take affirmative action to insure that employees are treated without regard to their race, creed, color, sex, national origin, ancestry or disability. Such action shall include, but not be limited to the following: employment, upgrading, demotion, transfer, recruiting or recruitment, advertising, lay-off or termination, rates of pay or other compensation and selection for training, including apprenticeship.

In the event of the bidder's non-compliance with this non-discrimination clause, the contract may be canceled or terminated by the City of Clemson. The bidders may be declared, by the City of Clemson, ineligible for further contracts with the City of Clemson until satisfactory proof of intent to comply shall be made by the vendor. The bidder agrees to include this non-discrimination clause in any sub-contracts connected with the performance of this agreement.

BIDDER

SIGNATURE

TITLE

NON-COLLUSION AFFIDAVIT

Clemson Park Phase 1 ITB 2025-01-002

The following affidavit is to accompany the bid:

STATE OF _____

COUNTY OF _____

Owner, Partner or Officer of Firm, _____

Company Name, Address, City and State

being of lawful age, being first duly sworn, on oath says that he/she is the agent authorized by the bidder to submit the attached bid. Affidavit further states as bidder, that they have not been a party to any collusion among bidders in restraint of competition by agreement to bid at a fixed price or to refrain from bidding; or with any office of the City of Clemson or any of their employees as to quantity, quality or price in the prospective contract; or any discussion between bidders and any official of the City of Clemson or any of their employees concerning exchange of money or other things of value for special consideration in submitting a sealed bid for:

FIRM NAME _____

SIGNATURE ______

Subscribed and sworn to before me this ____ day of 20_____

Clemson Park Phase 1 ITB 2025-01-002

CERTIFICATION OF COMPLIANCE WITH THE SOUTH CAROLINA ILLEGAL IMMIGRATION REFORM ACT

| I, | | , hereby stat | te and declare | | | |
|--|---------------------|--------------------|-----------------------------------|--|--|--|
| (| name) | , | | | | |
| that I am the | | of | | | | |
| | (title) | | (name of entity) | | | |
| and hereby certify to the City o | of Clemson that, a | s to any service | contract subsequently | | | |
| entered into with the City of C | lemson, that | | | | | |
| | | | ne of entity) | | | |
| intends to verify any new emp | oloyees' status, an | d require any of | my subcontractors or | | | |
| sub-subcontractors performing services under any contract with the City of Clemson to verify any | | | | | | |
| new employees' status, per the | e terms of the Sou | uth Carolina illeg | al Immigration Reform Act, and as | | | |
| set out in Title 41, Chapter 8 of the Code of Laws of South Carolina, 1976. | | | | | | |

(name of official)

Date:

ETHICS IN PUBLIC CONTRACTING AFFIDAVIT

| STATE OF |) |
|-----------|-------|
| COUNTY OF |) |

__, being first duly sworn, deposes and says that:

1. He/She is _____(title) for/of ____

(company/business), the Bidder that has submitted the attached Bid;

- 2. He/She is legally qualified and capable of signing this affidavit and is authorized to do so by Bidder;
- 3. He/She is fully informed regarding the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- 4. Such Bid is genuine and is made without fraud;
- 5. Neither the said Bidder, nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest has offered or received any kickbacks or inducements from any offeror, suppliers, manufacturer, or subcontractor in connection with the offer, and they have not conferred on any public employee, public member, or public official having official responsibility for this procurement or transaction, any payment, loan, subscription, advance, deposit of money, services, or anything of value as defined in Section 8-13-100 of the South Carolina Code of Laws; and
- 6. Furthermore, neither the Bidder, nor any of its officers, partners, owners, agents representatives, employees or parties in interest has any relationship with the City, another person, or organization that interferes with fair competition or that constitutes a conflict of interest with respect to a contract with the City.

| DATE | | | COMPANY/BUSINESS |
|--|---------|------|------------------|
| | | BY: | |
| | | | SIGNATURE |
| | | | PRINTED NAME |
| SWORN to before me this | | ITS: | |
| day of, 20 | | | TITLE |
| Notary Public for My commission expires | (state) | | |
| My commission expires | | | |
| By: | | | |
| (signature) | | | |

Request for Taxpayer Identification Number and Certification

Go to www.irs.gov/FormW9 for instructions and the latest information.

| Befor | e yo | bu begin. For guidance related to the purpose of Form W-9, see <i>Purpose of Form</i> , below. | | |
|--|------|---|---------------------|---|
| | 1 | Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the or entity's name on line 2.) | wner's name on line | 1, and enter the business/disregarded |
| | 2 | Business name/disregarded entity name, if different from above. | | |
| Print or type. Specific Instructions on page 3. | | Check the appropriate box for federal tax classification of the entity/individual whose name is entered only one of the following seven boxes. Individual/sole proprietor C corporation S corporation Partnership LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) . Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) to classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check box for the tax classification of its owner. Other (see instructions) | Trust/estate | Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any) (Applies to accounts maintained outside the United States.) |
| See | 5 | Address (number, street, and apt. or suite no.). See instructions. | Requester's name a | and address (optional) |
| | 6 | City, state, and ZIP code | | |
| | 7 | List account number(s) here (optional) | | |
| Par | t I | Taxpayer Identification Number (TIN) | | |
| | | | Social sec | curity number |

| Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid | | | | Social security number | | | | | |
|--|----|-----------------------------|---|------------------------|--|---|----|--|--|
| backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other | | | _ | | | - | | | |
| entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> . later. | or | | | | | | | | |
| 11, 101-1 | | Employer identification nur | | | | | er | | |

Note: If the account is in more than one name, see the instructions for line 1. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

| | Signature of |
|------|--------------|
| Here | U.S. person |

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification. New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

Date

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

must obtain your correct taxpayer identification number (TIN), which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid).

• Form 1099-DIV (dividends, including those from stocks or mutual funds).

• Form 1099-MISC (various types of income, prizes, awards, or gross proceeds).

• Form 1099-NEC (nonemployee compensation).

• Form 1099-B (stock or mutual fund sales and certain other transactions by brokers).

• Form 1099-S (proceeds from real estate transactions).

• Form 1099-K (merchant card and third-party network transactions).

• Form 1098 (home mortgage interest), 1098-E (student loan interest), and 1098-T (tuition).

• Form 1099-C (canceled debt).

• Form 1099-A (acquisition or abandonment of secured property).

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

Caution: If you don't return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding*, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued);

2. Certify that you are not subject to backup withholding; or

3. Claim exemption from backup withholding if you are a U.S. exempt payee; and

4. Certify to your non-foreign status for purposes of withholding under chapter 3 or 4 of the Code (if applicable); and

5. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting is correct. See *What Is FATCA Reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

• An individual who is a U.S. citizen or U.S. resident alien;

• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;

• An estate (other than a foreign estate); or

• A domestic trust (as defined in Regulations section 301.7701-7).

Establishing U.S. status for purposes of chapter 3 and chapter 4 withholding. Payments made to foreign persons, including certain distributions, allocations of income, or transfers of sales proceeds, may be subject to withholding under chapter 3 or chapter 4 of the Code (sections 1441–1474). Under those rules, if a Form W-9 or other certification of non-foreign status has not been received, a withholding agent, transferee, or partnership (payor) generally applies presumption rules that may require the payor to withhold applicable tax from the recipient, owner, transferor, or partner (payee). See Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities.

The following persons must provide Form W-9 to the payor for purposes of establishing its non-foreign status.

• In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the disregarded entity.

• In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the grantor trust.

• In the case of a U.S. trust (other than a grantor trust), the U.S. trust and not the beneficiaries of the trust.

See Pub. 515 for more information on providing a Form W-9 or a certification of non-foreign status to avoid withholding.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person (under Regulations section 1.1441-1(b)(2)(iv) or other applicable section for chapter 3 or 4 purposes), do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515). If you are a qualified foreign pension fund under Regulations section 1.897(I)-1(d), or a partnership that is wholly owned by qualified foreign pension funds, that is treated as a non-foreign person for purposes of section 1445 withholding, do not use Form W-9. Instead, use Form W-8EXP (or other certification of non-foreign status).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a saving clause. Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if their stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first Protocol) and is relying on this exception to claim an exemption from tax on their scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include, but are not limited to, interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third-party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester;

2. You do not certify your TIN when required (see the instructions for Part II for details);

3. The IRS tells the requester that you furnished an incorrect TIN;

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only); or

5. You do not certify to the requester that you are not subject to backup withholding, as described in item 4 under "*By signing the filled-out form*" above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

See also Establishing U.S. status for purposes of chapter 3 and chapter 4 withholding, earlier.

What Is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all U.S. account holders that are specified U.S. persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you are no longer tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

• Individual. Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note for ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040 you filed with your application.

• **Sole proprietor.** Enter your individual name as shown on your Form 1040 on line 1. Enter your business, trade, or "doing business as" (DBA) name on line 2.

• Partnership, C corporation, S corporation, or LLC, other than a disregarded entity. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

• Other entities. Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. Enter any business, trade, or DBA name on line 2.

• **Disregarded entity.** In general, a business entity that has a single owner, including an LLC, and is not a corporation, is disregarded as an entity separate from its owner (a disregarded entity). See Regulations section 301.7701-2(c)(2). A disregarded entity should check the appropriate box for the tax classification of its owner. Enter the owner's name on line 1. The name of the owner entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For

example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2. If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, enter it on line 2.

Line 3a

Check the appropriate box on line 3a for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3a.

| IF the entity/individual on line 1 is a(n) | THEN check the box for |
|--|--|
| Corporation | Corporation. |
| Individual or | Individual/sole proprietor. |
| Sole proprietorship | |
| • LLC classified as a partnership for U.S. federal tax purposes or | Limited liability company and enter the appropriate tax |
| • LLC that has filed Form 8832 or 2553 electing to be taxed as a corporation | classification: P = Partnership, C = C corporation, or S = S corporation. |
| Partnership | Partnership. |
| Trust/estate | Trust/estate. |

Line 3b

Check this box if you are a partnership (including an LLC classified as a partnership for U.S. federal tax purposes), trust, or estate that has any foreign partners, owners, or beneficiaries, and you are providing this form to a partnership, trust, or estate, in which you have an ownership interest. You must check the box on line 3b if you receive a Form W-8 (or documentary evidence) from any partner, owner, or beneficiary establishing foreign status or if you receive a Form W-9 from any partner, owner, or beneficiary that has checked the box on line 3b.

Note: A partnership that provides a Form W-9 and checks box 3b may be required to complete Schedules K-2 and K-3 (Form 1065). For more information, see the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

If you are required to complete line 3b but fail to do so, you may not receive the information necessary to file a correct information return with the IRS or furnish a correct payee statement to your partners or beneficiaries. See, for example, sections 6698, 6722, and 6724 for penalties that may apply.

Line 4 Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

• Generally, individuals (including sole proprietors) are not exempt from backup withholding.

• Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.

• Corporations are not exempt from backup withholding for payments made in settlement of payment card or third-party network transactions.

• Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space on line 4.

1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2).

2-The United States or any of its agencies or instrumentalities.

3—A state, the District of Columbia, a U.S. commonwealth or territory, or any of their political subdivisions or instrumentalities.

 $4\!-\!A$ foreign government or any of its political subdivisions, agencies, or instrumentalities.

5-A corporation.

6-A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or territory.

 $7-\mathrm{A}$ futures commission merchant registered with the Commodity Futures Trading Commission.

8—A real estate investment trust.

9—An entity registered at all times during the tax year under the Investment Company Act of 1940.

10—A common trust fund operated by a bank under section 584(a).

11-A financial institution as defined under section 581.

12-A middleman known in the investment community as a nominee or custodian.

13—A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

| IF the payment is for | THEN the payment is exempt for |
|--|---|
| Interest and dividend payments | All exempt payees except for 7. |
| Broker transactions | Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012. |
| Barter exchange transactions and patronage dividends | Exempt payees 1 through 4. |
| Payments over \$600 required to be reported and direct sales over \$5,000 ¹ | Generally, exempt payees 1 through 5. ² |
| Payments made in settlement of payment card or third-party network transactions | Exempt payees 1 through 4. |

¹See Form 1099-MISC, Miscellaneous Information, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) entered on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37).

B-The United States or any of its agencies or instrumentalities.

C-A state, the District of Columbia, a U.S. commonwealth or territory, or any of their political subdivisions or instrumentalities.

D-A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i).

E-A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i).

G-A real estate investment trust.

H-A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940.

I-A common trust fund as defined in section 584(a).

J-A bank as defined in section 581.

K-A broker.

L-A trust exempt from tax under section 664 or described in section 4947(a)(1).

M-A tax-exempt trust under a section 403(b) plan or section 457(g) plan.

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, enter "NEW" at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have, and are not eligible to get, an SSN, your TIN is your IRS ITIN. Enter it in the entry space for the Social security number. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.SSA.gov.* You may also get this form by calling 800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for EIN loop of the term online by accessing the IRS website at *www.irs.gov/EIN.* Go to *www.irs.gov/Forms* to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to *www.irs.gov/OrderForms* to place an order and have Form W-7 and/or Form SS-4 mailed to you within 15 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and enter "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, you will generally have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon. See also *Establishing U.S. status for purposes of chapter 3 and chapter 4 withholding*, earlier, for when you may instead be subject to withholding under chapter 3 or 4 of the Code.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third-party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct

TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

| For this type of account: | Give name and SSN of: | |
|---|---|--|
| 1. Individual | The individual | |
| 2. Two or more individuals (joint account) other than an account maintained by an FFI | The actual owner of the account or, if combined funds, the first individual on the account ¹ | |
| 3. Two or more U.S. persons (joint account maintained by an FFI) | Each holder of the account | |
| Custodial account of a minor (Uniform Gift to Minors Act) | The minor ² | |
| 5. a. The usual revocable savings trust (grantor is also trustee) | The grantor-trustee ¹ | |
| b. So-called trust account that is not a legal or valid trust under state law | The actual owner ¹ | |
| Sole proprietorship or disregarded entity owned by an individual | The owner ³ | |
| Grantor trust filing under Optional Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))** | The grantor* | |

| For this type of account: | Give name and EIN of: |
|---|---------------------------|
| . Disregarded entity not owned by an individual | The owner |
| A valid trust, estate, or pension trust | Legal entity ⁴ |
| Corporation or LLC electing corporate status on Form 8832 or Form 2553 | The corporation |
| Association, club, religious, charitable, educational, or other tax-exempt organization | The organization |
| Partnership or multi-member LLC | The partnership |
| . A broker or registered nominee | The broker or nominee |
| Account with the Department of Agriculture in the name of a public entity (such as a state or local | The public entity |

payments 15. Grantor trust filing Form 1041 or under the Optional Filing Method 2, requiring Form 1099 (see Regulations section 1.671-4(b)(2)(i)(b))**

government, school district, or prison)

that receives agricultural program

8

9.

10.

11.

12. 13.

14.

¹List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

²Circle the minor's name and furnish the minor's SSN.

³You must show your individual name on line 1, and enter your business or DBA name, if any, on line 2. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.)

* **Note:** The grantor must also provide a Form W-9 to the trustee of the trust.

** For more information on optional filing methods for grantor trusts, see the Instructions for Form 1041.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information, such as your name, SSN, or other identifying information, without your permission to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- · Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax return preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity, or a questionable credit report, contact the IRS Identity Theft Hotline at 800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 877-777-4778 or TTY/TDD 800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 800-366-4484. You can forward suspicious emails to the Federal Trade Commission at *spam@uce.gov* or report them at *www.ftc.gov/complaint*. You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.ldentityTheft.gov* and Pub. 5027.

Go to *www.irs.gov/IdentityTheft* to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and territories for use in administering their laws. The information may also be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payors must generally withhold a percentage of taxable interest, dividends, and certain other payments to a payee who does not give a TIN to the payor. Certain penalties may also apply for providing false or fraudulent information.



STATE OF SOUTH CAROLINA DEPARTMENT OF REVENUE

NONRESIDENT TAXPAYER REGISTRATION AFFIDAVIT INCOME TAX WITHHOLDING

| dor.sc.gov AFFIDAVIT INCOME TAX WITHHOLDING | | 0020 |
|---|-------------------------------|-------------------|
| Mail to: The company or individual you are contracting with. | | |
| The undersigned nonresident taxpayer hereby certifies as follows: | | |
| Legal business name: FEIN: | | |
| Trade name if applicable (doing business as): | | |
| Mailing address: | | |
| City: | State: | ZIP: |
| Check and complete one: | | |
| ☐ Hiring or contracting with: | | |
| Name: | | |
| Mailing address: | | |
| City: | State: | ZIP: |
| Receiving rentals or royalties from: | | |
| Name: | | |
| Mailing address: | | |
| City: | State: | ZIP: |
| I hereby certify that the above named nonresident taxpayer is current | ly registered with (check the | appropriate box). |
| The South Carolina Secretary of State (SCSOS) or | | appropriate boxy. |
| The South Carolina Department of Revenue (SCDOR): | | |
| Date of registration: | | |

I understand that by this registration, the above named nonresident taxpayer has agreed to be subject to the jurisdiction of the SCDOR and the courts of South Carolina to determine its South Carolina tax liability, including estimated taxes, together with any related interest and penalties.

I understand the SCDOR may revoke the withholding exemption granted under SC Code Section 12-8-550 (temporarily doing business or professional services in South Carolina) or SC Code Section 12-8-540 (rentals) at any time it determines that the above named nonresident taxpayer is not cooperating with the SCDOR in the determination of its correct South Carolina tax liability.

I hereby certify that I have examined this affidavit and to the best of my knowledge and belief, it is true, correct, and complete. I understand that under SC Code Section 12-54-44 (B)(6)(a), I can be fined and/or imprisoned for furnishing a false statement.

Signature of nonresident taxpayer (owner/partner/corporate officer when relevant)

Date

Print name

If corporate officer, state title

INSTRUCTIONS

Submit this form to the company or individual you are contracting with.

Do not submit this form to the SCDOR.

Purpose of Affidavit

A person is not required to withhold taxes for a nonresident taxpayer who submits an affidavit certifying that they are registered with either the SCSOS or the SCDOR.

Required Withholding Payments

SC Code Section 12-8-550 requires persons hiring or contracting with a nonresident taxpayer to withhold 2% of each payment made to the nonresident where the payments under the contract exceed \$10,000. However, this section does not apply to payments on purchase orders for tangible personal property when those payments are not accompanied by services to be performed in this state.

SC Code Section 12-8-540 requires persons making payment to a nonresident taxpayer, of rentals or royalties at a rate of \$1,200 or more a year for the use of or for the privilege of using property in South Carolina, to withhold taxes on the nonresident taxpayer at the following rates:

- If payments are made to a nonresident taxpayer who is not a corporation, the withholding is computed at South Carolina's top marginal Individual Income Tax rate for the tax year.
- If payments are made to a nonresident taxpayer who is a corporation, the withholding is computed at 5%.

SC Code sections are available at dor.sc.gov/policy.