

**CITY OF DURHAM, NORTH CAROLINA**

**PROJECT MANUAL**

**INCLUDING**

**BIDDING DOCUMENTS, CONTRACT DOCUMENTS, AND TECHNICAL  
SPECIFICATIONS**

**FOR**

**DURHAM**



**1 8 6 9**  
CITY OF MEDICINE

**CONTRACT: 10-013**

**Issued: January 28, 2013**

**Project: Durham Rain Catchers**

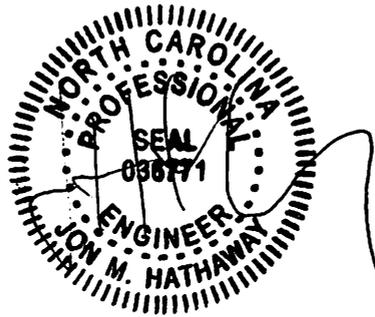
**Stormwater and GIS Services Division**

**Department of Public Works**

**101 City Hall Plaza, Durham, North Carolina 27701**

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**CONTRACT: 10-013**  
**January 28, 2013**  
**PROJECT:**  
**Durham Rain Catchers**



**STORMWATER SERVICES DIVISION**  
**DEPARTMENT OF PUBLIC WORKS**  
**CITY OF DURHAM, NORTH CAROLINA**

**CITY OF DURHAM  
MAYOR AND CITY COUNCIL**

William V. Bell, Mayor

Cora Cole-McFadden  
Eugene A. Brown  
Diane Catotti

Howard Clement, III  
Steve Schewel  
Don Moffitt

**CITY OF DURHAM  
STAFF**

Thomas J. Bonfield, City Manager  
Patrick W. Baker, City Attorney  
D. Ann Gray, City Clerk  
Marvin G. Williams, Director of Public Works  
Paul Wiebke, Assistant Director, Stormwater & GIS Services  
Laura Webb Smith, Stormwater & GIS Services Division

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INVITATION TO BID

Contract: 10-013

Project: Durham Rain Catchers

Owner/Issuing Office:

Attention: Laura Webb Smith  
City of Durham  
Department of Public Works  
Stormwater Services Division  
101 City Hall Plaza  
Durham, North Carolina 27701  
(919) 560-4326

Engineer:

Attention: Kevin Nunnery  
Biohabitats, Inc.  
8218 Creedmoor Road, Suite 201  
Raleigh, NC 27613  
(919) 518-0311

Date: January 28, 2013

The City of Durham will receive sealed bids from Bidders on Thursday, February 28, 2013 before 4 p.m. in the Public Works Department, 101 City Hall Plaza, Durham, NC 27701. The City of Durham will open sealed formal Bids submitted by Bidders at 10 a.m., Monday, March 4, 2013 for Contract 10-013, Project: Durham Rain Catchers in the Department of Public Works Conference Room, Third Floor, 101 City Hall Plaza, Durham, North Carolina. The Project involves the furnishing of all materials, labor, equipment, tools, etc. unless otherwise specified, for the complete installation of rain gardens and trees at various site locations throughout the City of Durham.

Beginning January 28, 2013, the Project Manual including Bidding Documents, Contract Documents, and Technical Specifications, including Drawings, will be on file in the Department of Public Works, Stormwater Services Division, Third Floor, 101 City Hall Plaza, Durham, North Carolina. Copies of the Bidding Documents, Contract Documents, and Technical Specifications, including Drawings, may be viewed and downloaded, free of charge, from the City of Durham, Department of Finance, Purchasing Division web site: <http://durhamnc.gov/ich/as/fin/Pages/bids.aspx> .

City of Durham Street Construction Specifications and Water and Sewer Construction Specifications may be downloaded at: <http://www.durhamnc.gov/departments/works/engineering.cfm>.

Bidders are encouraged to attend the pre-Bid conference at 10 a.m., Thursday, February 7, 2013 in the Department of Public Works Conference Room, Third Floor, 101 City Hall Plaza, Durham, North Carolina.

Each Bidder must be licensed under Chapter 87 of the North Carolina General Statutes. The City Council of the City of Durham reserves the right to reject any or all of the Bids. All Bids must include a non-collusion affidavit.

To ensure that all Bidders using the Purchasing Division's web site are kept up to date on any Addenda, changes, or information notices, please send an email to [Laura.Smith@DurhamNC.gov](mailto:Laura.Smith@DurhamNC.gov) indicating your intention to prepare a Bid for the Project. Failure to complete this step may render your Bid as non-responsive.

Each Bidder is advised that the Work may be inspected and supervised by an Engineer or firm under the direction of the City of Durham. The Engineer or firm may also be involved in proposed method of construction for the Site Work.

Contract: 10-013, Project: Durham Rain Catchers

The City of Durham requires the Project to be completed in 200 calendar days from date of Notice to Proceed.

No Bid shall be considered or accepted unless at the time of its filing the same shall be accompanied by a deposit of cash or a certified or cashier's check drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation (FDIC), in an amount equal to five percent (5%) of the amount of the Bid. The check shall be made payable to the City of Durham. Said deposit shall guarantee that the Contract will be entered into by the successful Bidder if the award is made. Such deposit of cash or certified or cashier's check may be held by the City until the successful Bidder has executed and delivered the Contract Documents, including performance and payment bond, to the City of Durham and returned or kept in accordance with North Carolina General Statute 143-129.

Refer to other Bidding requirements described in Document 00 21 15 and Document 00 31 00.

In lieu of the cash deposit or certified or cashier's check mentioned above, the Bidder may file a Bid bond in the same amount executed by a corporate surety authorized to execute such bonds in North Carolina and conditioned as provided by North Carolina General Statute 143-129 and in the form attached to the Bidding Documents (see Appendix F) or on file with the Engineer. Bid bond forms enclosed as part of the Bidding Documents must be properly executed at the time Bids are submitted before Bid will be considered. Properly executed Power of Attorney of the corporate surety's agent shall accompany such bond and be attached to the page provided therefore in the Bidding Documents.

Bids shall be submitted under a condition of irrevocability, except as required by law, for a period of ninety (90) days after Bid opening.

The City of Durham reserves the right to accept or reject any or all Bids.

END OF DOCUMENT

DOCUMENT 00 21 15

INSTRUCTIONS TO BIDDERS - EJCDC

1.10 SUMMARY

- A. Document Includes:
  - 1. Defined terms.
  - 2. Copies of Bidding Documents.
  - 3. Qualifications of Bidders.
  - 4. Examination of Bidding Documents, other related data, and Site.
  - 5. Pre-Bid conference.
  - 6. Site and other areas.
  - 7. Interpretations and Addenda.
  - 8. Bid security.
  - 9. Contract Times.
  - 10. Liquidated damages.
  - 11. Substitute and “or-equal” items.
  - 12. Subcontractors, suppliers, and others.
  - 13. Preparation of Bid.
  - 14. Basis of Bid; comparison of Bids.
  - 15. Submittal of Bid.
  - 16. Modification and withdrawal of Bid.
  - 17. Opening of Bids.
  - 18. Bids to remain subject to acceptance.
  - 19. Evaluation of Bids and award of Contract.
  - 20. Contract security and insurance.
  - 21. Signing of Agreement.
  - 22. Sales and use taxes.
  
- B. Related Documents:
  - 1. Document 00 11 16 - Invitation to Bid.
  - 2. Document 00 31 00 - Available Project Information.
  - 3. Document 00 41 43 - Bid Form - Unit Price (Single-Prime Contract).
  - 4. Document 00 72 15 - General Conditions – EJCDC Stipulated Sum (Single-Prime Contract).
  - 5. Bond types and values.
  
- C. Notice of Bidding Documents and Contract Documents Provision Changes and Updates
  - 1. The Bidder is advised that these Bidding Documents and Contract Documents include numerous changes, revisions, and updates from prior City of Durham contracts.

1.11 DEFINED TERMS

- A. Refer to Article 1 of the General Conditions.

## 1.12 COPIES OF BIDDING DOCUMENTS

- A. The Bidding Documents are identified as “Project Manual including Bidding Documents, Contract Documents, and Technical Specifications for Contract No. 10-013, Project: “Durham Rain Catchers.”

Bidding Documents may be viewed and downloaded from the City of Durham, Public Works Department web site:

<http://durhamnc.gov/ich/op/pwd/consproj/Pages/Home.aspx> .

To ensure that all Bidders are kept up to date on any Addenda, changes, or information notices, please send an email to [Laura.Smith@DurhamNC.gov](mailto:Laura.Smith@DurhamNC.gov) indicating your intention to prepare a Bid for the Project. Failure to complete this step may render your Bid as non-responsive.

- B. Complete sets of Bidding Documents shall be used in preparing Bids; neither the City of Durham nor the Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- C. Upon receipt of Bidding Documents, Bidder shall verify that the Bidding Documents are complete. The Bidder shall notify the City if they have received incomplete Bidding Documents.
- D. The City of Durham and Engineer, in making copies of the Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

## 1.13 QUALIFICATIONS OF BIDDERS

- A. Bidders must submit the completed Small Disadvantaged Business Enterprise (SDBE) Contractor Procurement Form with the bid. The form is attached as Appendix A and can be found at the following web site: [http://durhamnc.gov/ich/as/eoea/Documents/equal\\_procurement.pdf](http://durhamnc.gov/ich/as/eoea/Documents/equal_procurement.pdf). There are no SDBE goals for this project. However, failure to submit the procurement form will result in a bid deemed unresponsive.
- B. The Contractor must provide the attached Contractor Safety Evaluation Form (Appendix B).
- C. Notice Under the Americans with Disabilities Act (ADA):  
Notice Under the Americans with Disabilities Act - A person with a disability may receive an auxiliary aid or service to effectively participate in city government activities by contacting the ADA Coordinator, voice (919) 560-4197, fax (919) 560-4196, TTY (919) 560-1200, or [ADA@durhamnc.gov](mailto:ADA@durhamnc.gov), as soon as possible but no later than forty-eight (48) hours before the event or deadline date.

- D. The Contractor shall demonstrate the ability to complete a majority of all portions of the Contract using equipment and personnel owned and employed by the Contractor. The Contractor shall include the following information in the Bid in the spaces provided:
1. The number of bioretention and/or rain gardens constructed by the Contractor.
  2. The number of years the Contractor has been regularly engaged in similar Contract municipal work and a list of projects they have completed with their equipment and personnel.
  3. A list of projects performed in residential, private homeowner properties. The successful bidder must document at least three residential, private homeowner projects.
  4. Photographs of bioretention and residential rain gardens constructed by the Contractor just after construction and one year post-construction. The successful bidder must demonstrate at least three successful bioretention or rain garden projects.
  5. A list of the Contractor's personnel experienced to do the Work including the Superintendent to be in charge of the Work, including the length of their experience with this type of municipal work.
  6. A list of the Contractor's equipment in good condition and suitable for completion of the Contract.
- E. Miscellaneous
1. If the Contractor fails to demonstrate the ability to complete a majority of all portions of the Contract with equipment and personnel owned and employed by the Contractor, the Bid may be considered non-responsive.
  2. The Contractor shall be licensed under Chapter 87 of the North Carolina General Statutes as a General Contractor. The Privilege License of the Contractor shall be included in the Bid.
  3. A Privilege License for all Subcontractors of the apparent Successful Bidder, and those Bidders requested by the City of Durham, shall be filed within five (5) days after the Bid opening.
  4. City of Durham Privilege Licenses may be obtained from the Department of Finance, Treasury Management Division, located at 101 City Hall Plaza, Durham, North Carolina, (919) 560-4700.

#### 1.14 EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

- A. Subsurface and Physical Conditions
1. The General Conditions identify:
    - a. Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that the Engineer has used in preparing the Bidding Documents.
    - b. Those drawings of physical conditions in or relating to existing surface and subsurface structures at or contiguous to the Site (except Underground Facilities) that the Engineer has used in preparing the Bidding Documents.
- B. Copies of reports and drawings referenced in Paragraph 1.5.A.1 will be made available by the City of Durham to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which the Bidder is entitled to rely and have been identified and established as provided in

- C. Paragraph 4.02 of the General Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
- D. Underground Facilities Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to the City of Durham and Engineer by owners of such Underground Facilities, including the City of Durham, or others.
- E. Hazardous Environmental Condition
  - 2. The General Conditions identify those reports and drawings related to a Hazardous Environmental Condition identified at the Site, if any, that Engineer has used in preparing the Bidding Documents. Copies of reports and drawings referenced in Paragraph 1.5.D.1 will be made available by the City of Durham to any Bidder on request. Those reports and drawings are not part of the Contract Documents but the “technical data” contained therein upon which Bidder is entitled to rely and have been identified and established as provided in Paragraph 4.06 of the General Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
- F. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated conditions appear in Paragraph 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to Hazardous Environmental Conditions at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Technical Specifications or identified in the Contract Documents to be within the scope of the Work appear in Paragraph 4.06 of the General Conditions.
- G. On request, the City of Durham will provide Bidder access to representative project Sites. All requests must be made to and coordinated by Project Manager Laura Webb Smith (919-560-4326, ext. 30235). The Bidder may not access any Site without written permission from the City of Durham. Reference is made to Paragraph 7.04 of the General Conditions for the identification of the general nature of other work that is to be performed at the Site by the City of Durham or others (such as utilities and other contractors) that relates to the Work contemplated by these Bidding Documents. On request, the City of Durham will provide to each Bidder for examination access to or copies of Contract Documents (other than portions thereof related to price) for such other work.
- H. It is the responsibility of each Bidder before submitting a Bid to:
  - 1. examine and carefully study the Bidding Documents, the other related data identified in the Bidding Documents, and any Addenda;

2. become familiar with and satisfy Bidder as to the general, local, and site conditions that may affect cost, progress, and performance of the Work;
  3. become familiar with and satisfy Bidder as to all federal, state, and local, Laws and Regulations that may affect cost, progress, and performance of the Work;
  4. carefully study all:
    - a. reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in Paragraph 4.02 of the General Conditions, and
    - b. reports and drawings of Hazardous Environmental Conditions at the Site which have been identified in Paragraph 4.06 of the General Conditions;
  5. obtain and carefully study (or accept consequences of not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying and specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto;
  6. agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents;
  7. become aware of the general nature of the Work to be performed by the City of Durham and others at the Site that relates to the Work as indicated in the Bidding Documents;
  8. correlate the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;
  9. promptly give Engineer written notice of all conflicts, errors, ambiguities, omissions, or discrepancies that Bidder discovered in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
  10. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- I. The submission of a Bid will constitute an incontrovertible representation by the Bidder that Bidder has complied with every requirement of this Paragraph 1.5, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and

- J. that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performing and furnishing of the Work.

#### 1.15 PRE-BID CONFERENCE

- A. A pre-Bid conference will be held at 10 a.m., Thursday, February 7, 2013 in the Department of Public Works Conference Room, Third Floor, 101 City Hall Plaza, Durham, North Carolina. Representatives of the City of Durham, Engineer, and the Department of EO/EA will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such agenda as Engineer considers necessary in response to questions arising from the conference. Oral statements may not be relied upon and shall not be binding or legally effective.

#### 1.16 SITE AND OTHER AREAS

- A. The Sites are identified in the Bidding Documents. Right-of-Entry and easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by the City of Durham unless otherwise provided in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by the Contractor.

#### 1.17 INTERPRETATIONS AND ADDENDA

- A. All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. All Addenda will also be posted on the City of Durham, Public Works Department web site:<http://durhamnc.gov/ich/op/pwd/consproj/Pages/Home.aspx>. Questions received less than seven (7) days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications shall be without legal effect.
- B. Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by the City of Durham or Engineer.

#### 1.18 BID SECURITY

- A. No Bid shall be considered or accepted unless at the time of its filing the same shall be accompanied by a deposit of cash or a certified or cashier's check drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation (FDIC), in an amount equal to five percent (5%) of the amount of the Bid. The check shall be made

payable to the City of Durham. Said deposit shall guarantee that the Contract shall be entered into by the Successful Bidder if the award is made.

- B. In lieu of the cash deposit or certified or cashier's check mentioned above, the Bidder may file a Bid bond in the same amount executed by a corporate surety authorized to execute such bonds in North Carolina and conditioned as provided by North Carolina General Statute 143-129 and in the form attached to the Bidding Documents or on file with the Engineer. Bid bond forms must be properly executed at the time Bids are submitted before Bid will be considered. Properly executed Power of Attorney of the corporate surety's agent shall accompany such bond and be attached to the page provided therefore in the Contract Documents.
- C. The Bid security of the Successful Bidder shall be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice to Award, whereupon the Bid Security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within fifteen (15) days after the Notice of Award, the City of Durham may annul the Notice of Award and the Bid Security of that Bidder will be forfeited. The Bid security of other Bidders whom the City of Durham believes to have a reasonable chance of receiving the award may be retained by the City of Durham until the earlier of seven (7) days after the Effective Date of the Agreement or sixty-one (61) days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.
- D. Bid security of other Bidders who the City of Durham believes do not have a reasonable chance of receiving the award will be returned within seven (7) days after the Bid opening.
- E. In the event the Contract is not awarded, all Bid securities will be returned within seven (7) days after the Bid opening.

#### 1.19 CONTRACT TIMES

- A. The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

#### 1.20 LIQUIDATED DAMAGES

- A. Provisions for liquidated damages, if any, are set forth in the Agreement.

#### 1.21 SUBSTITUTE AND "OR-EQUAL" ITEMS

- A. The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or "or-equal" items.
- B. Application for review of substitute or "or-equal" materials or equipment prior to submitting of Bids shall be in accordance with Section 133-3 of the North Carolina General Statutes, and the following procedures. Application for review of substitute or

“or-equal” materials or equipment shall be by Bidders. Applications will not be considered from suppliers, distributors or subcontractors. Bidders shall submit applications to Engineer at least twenty (20) days prior to the date for the opening of Bids. Documentation shall be in accordance with [Paragraph 6.05 of the General Conditions]. Judgment concerning substitutes and “or-equal” reviews will be determined by Engineer. Material and equipment, which are accepted as a result of such review, will be identified as part of an Addendum.

- C. Application for review of substitute or “or-equal” materials and equipment, which are received after twenty (20) days prior to the date for the opening of Bids, will not be considered by the Engineer until after the Effect Date of the Agreement. The procedure for submission of any application for review of substitute or “or-equal” items by Contractor and consideration by Engineer is set forth in Paragraph 6.05 of the General Conditions.
- D. Any Bid conditioned upon furnishing equipment or materials which are not responsive to the Bidding Documents will be rejected.

#### 1.22 SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- A. A Privilege License for all Subcontractors must be filed within five (5) days after the Bid opening.
- B. The City of Durham reserves the right to reject a proposed Subcontractor for reasonable cause.
- C. The General Conditions, Paragraph 6.06, require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to the City of Durham in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five (5) days after Bid opening, submit to the City of Durham a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by the City of Durham. If the City of Durham or Engineer, after due investigation, has reasonable objection to any

proposed Subcontractor, Supplier, individual, or entity, the City of Durham may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, without an increase in the Bid.

- D. If apparent Successful Bidder declines to make any such substitution, the City of Durham may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds of forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which the City of Durham or Engineer makes no written objection prior to giving of the Notice of Award will be deemed acceptable to the City of Durham and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.06 of the General Conditions.
- E. Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

#### 1.23 PREPARATION OF BID

- A. The approved Bid form is included with the Bidding Documents. Additional copies may be obtained from the Engineer. All Bids must be submitted on the approved Bid form.
- B. The unit prices for specific items shall reflect all costs associated with furnishing, installing all items of Work as indicated on the Drawings and Technical Specifications, complete, in place and accepted, per the City of Durham Standards and Specifications.
- C. All blanks on the Bid form shall be completed by printing in ink or by typewriter and the Bid signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid form. A Bid price shall be indicated for each unit price item listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.
- D. The omission of prices for any item on the Bid form, or the tendering of any unbalanced Bid may be the cause for the rejection of the submitted Bid.
- E. The estimated quantities contained on the Bid form are for the purpose of comparing Bids. While the quantities are close approximations, they are not guaranteed. Payment will be made on the basis of the Work as actually executed at the unit prices set forth in the executed Agreement and under the provisions of such Agreement.
- F. There shall be no additional compensation to the Contractor for materials, equipment, or work that is incidental to the successful completion of the Contract. Incidental costs include the costs inherent to the complete installation of those individual items included on the Bid form. For example, those costs associated with water supply, waste disposal, temporary electrical services, surveying, staking, and storage, are incidental and defined within the Technical Specifications of the Bidding Documents.

- G. Item values on the Bid form shall be given as figures (i.e. \$23,000.00) and in writing (i.e. Twenty-three thousand and no/100's dollars).
- H. A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. Insert the corporate officer's capacity under each signature. The corporate address and state of incorporation shall be shown below the signatures.
- I. A Bid by a limited liability company shall be executed in the name of the firm by a member in the presence of a witness with signature, and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown below the signature. Affix the limited liability company seal adjacent to the signatures.
- J. A Bid by an individual or sole proprietorship shall be executed with a signature of the individual/sole proprietor in the presence of a witness with signature. Insert the words "Individual/Sole Proprietor" under the signature and show the Bidder's name and official address. Affix the individual/sole proprietor seal adjacent to the signature.
- K. A Bid by a partnership shall be executed in the partnership name and signed by all partners (whose title must appear under the signature) in the presence of a witness with signature, accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signatures. Affix the partnership seal adjacent to the each partner signature.
- L. A Bid by a joint venture shall be executed by each party of the joint venture under their respective seals in a manner appropriate to each such party as described above for each party type. Provide a single signature sheet for each party to the joint venture.
- M. All names shall be typed or printed in ink below the signatures.
- N. The Bid shall contain an acknowledgment of all Addenda, the numbers of which shall be filled in on the Bid form.
- O. The address and telephone number for communication regarding the Bid shall be shown.
- P. The Bid shall contain evidence of the Bidder's authority and qualification to do business in the State of North Carolina or covenant to obtain such qualification prior to the award of the Contract. Bidder's State of North Carolina contractor license number, if any, shall also be shown on the Bid form.

1.24 BASIS OF BID; COMPARISON OF BIDS

- A. Unit Price
  - 1. Bidders shall submit a Bid on a unit price basis for each item of Work listed on the Bid Schedule.
  - 2. The total of all estimated prices will be the sum of the Products of the estimated quantity of each item and the corresponding unit price. The final quantities and

3. Contract Price will be determined in accordance with Paragraph 11.03 of the General Conditions.
  4. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
- B. The Bid price shall include such amounts as the Bidder deems proper for overhead and profit on account of cash allowances, if any, named in the Contract Documents as provided in Paragraph 11.02 of the General Conditions.
- C. Bid prices will be compared after adjusting for differences in the time designated by Bidders for Substantial Completion. The adjusting amount will be determined at the rate set forth in the Contract Documents for liquidated damages for failing to achieve Substantial Completion for each day before or after the time allowed as set forth in the Agreement.

1.25 SUBMITTAL OF BID

- A. Bidders shall be solely responsible for delivery of Bids in the required manner and time.
- B. No Bid shall be accepted or considered unless the complete set of required and executed documents is included with the Contractor's submittal.
- C. With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid form, and, if required, the Bid bond form. The unbound copy of these forms is to be completed and submitted.
- D. Each Bid shall include non-collusion affidavits for the Bidder. Affidavits for all Subcontractors of the apparent Successful Bidder, and those Bidders requested by the City of Durham, must be filed within five (5) days after the Bid opening. Blank Non-Collusion Affidavit Forms can be found in Appendix E.
- E. A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope plainly marked with the following information:
1. Contract: 10-013
  2. Project: Durham Rain Catchers
  3. Name of Bidder: \_\_\_\_\_
  4. Address of Bidder: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  5. Phone Number of Bidder: \_\_\_\_\_
  6. Contact Person for Bidder: \_\_\_\_\_
  7. Phone Number of Contact: \_\_\_\_\_
  8. Bidder's North Carolina General Contractor's License Number: \_\_\_\_\_
  9. The above-name Bidder has enclosed, and checked as appropriate, the following items in the Bid (check all):
    - a. \_\_\_\_\_ Bid Form

- b. \_\_\_\_\_ SDBE Procurement Form
- c. \_\_\_\_\_ Contractor Safety Evaluation Form
- d. \_\_\_\_\_ Non-Collusion Affidavit of Bidder
- e. \_\_\_\_\_ Privilege License of Bidder
- f. \_\_\_\_\_ Bid Security
- g. \_\_\_\_\_ List of Contractor Equipment and Personnel

F. Incorrect information, incomplete information, or irregularities on the Bid envelope may be cause for a Bid to be declared invalid or informal. Invalid or informal Bids will not be opened.

G. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate mailing/delivery envelope plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to:

Attention: Laura Webb Smith  
 City of Durham  
 Department of Public Works  
 Stormwater and GIS Services Division  
 101 City Hall Plaza  
 Durham, North Carolina 27701  
 (919) 560-4326

H. Bids submitted after the time listed in the Agreement and Invitation to Bid will be returned to the Bidder unopened.

I. Bids that are unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations, or irregularities of any kind, may be declared unacceptable at the City of Durham's discretion.

J. Bid Forms, appendices, and enclosures which are improperly prepared may be declared unacceptable at the City of Durham's discretion.

K. Failure to provide security deposit, bonds, or insurance requirements will invalidate the Bid at the City of Durham's discretion.

1.26 MODIFICATION AND WITHDRAWAL OF BID

A. Amendments to properly submitted Bids will be permitted when received in writing prior to Bid opening and when endorsed by the same party or parties who signed and sealed the Bid.

B. Bidders may withdraw their Bid by written request at any time before Bid opening.

C. No Bidder may withdraw a Bid after Bid opening and prior to the conclusion to the period of time stated in the Bid form except to the extent, if any, that may be required by law.

1.27 OPENING OF BIDS

- A. Bids shall be opened, unless obviously non-responsive, at the time and place indicated in the Advertisement or Invitation to Bid and read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.
- B. Bidders may be present at the opening of Bids.

1.28 BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- A. All Bids will remain subject to acceptance for the period of time stated in the Bid form, but the City of Durham may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

1.29 EVALUATION OF BIDS AND AWARD OF CONTRACT

- A. The City of Durham reserves the right to reject any or all Bids, including without limitation, nonconforming, non-responsive, unbalanced, or conditional Bids. The City of Durham further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. The City of Durham may also reject the Bid of any Bidder if the City believes that it would not be in the best interest of the Project to make an award to that Bidder. The City of Durham also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate terms with the Successful Bidder.
- B. More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- C. In evaluating Bids, the City of Durham will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid form or prior to the Notice of Award.
- D. In evaluating Bidders, the City of Durham will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Supplies, and other individuals or entities must be provided as provided in the General Conditions.
- E. The City of Durham may conduct such investigations as the City deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.
- F. If the Contract is to be awarded, the City of Durham will award the Contract to the Bidder whose Bid is in the best interests of the Project.

1.30 CONTRACT SECURITY AND INSURANCE

- A. Article 5 of the General Conditions sets forth the City of Durham's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the executed Agreement to the City of Durham, it shall be accompanied by such bonds.

1.31 SIGNING OF AGREEMENT

- A. After the City of Durham has identified the Successful Bidder, the Engineer on behalf of the City of Durham, will issue to the Successful Bidder, a written Notice to Award.
- B. When the City of Durham gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts to the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within fifteen (15) days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to the City of Durham. Within ten (10) days after execution of the Agreement by the Manager, the City of Durham will deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

1.32 SALES AND USE TAXES

The North Carolina General Assembly adopted legislation which required that contractors pay North Carolina Sale and Use Tax on materials, supplies, fixtures, and equipment used by the contractor in the performance of contracts with cities, counties, and towns on contracts dated July 1, 1961 or later.

The North Carolina General Assembly also authorized a refund to cities, counties, and towns of sales and use taxes paid on direct purchases of tangible personal property and construed purchases in the performance of contracts to be direct purchases.

- A. The Bidder shall not include North Carolina Sales and Use Tax in unit price Bid. The Contractor will be reimbursed for all North Carolina Sales and Use Tax paid during any preceding month, at the time the monthly estimate is paid, provided the required submittals are made to the City of Durham. Refer to Paragraph 6.10 of the General Conditions for additional information.

END OF DOCUMENT

DOCUMENT 00 31 00

AVAILABLE PROJECT INFORMATION

1.1 SUMMARY

- A. Document Includes:
  - 1. Project information and location.
  - 2. List of drawings.
  - 3. Subsurface investigation report.
  - 4. Topographic survey.
  - 5. Existing conditions survey.
  - 6. City of Durham standards.
  - 7. North Carolina Department of Transportation (NCDOT) standards.
  - 8. North Carolina Department of Environment and Natural Resources (NCDENR) standards.
- B. Related Documents:
  - 1. 00 21 15 - Instructions to Bidders - EJCDC: Examination of Bidding Documents, other related data, and Site.

1.2 PROJECT INFORMATION AND LOCATION

- A. The Work contemplated under the provisions of this Contract includes, but may not be limited to, locating utilities, installation of rain gardens (excavation, installation of media and mulch, installation of inlet, creating outlet weir berm, and planting rain garden bed and berm), and planting trees in specified residential locations in Durham.
- B. The Work Sites for this Contract include, but are not limited to, the residential area approximately encompassed by West Main Street to the south, Watts Street to the east, Club Boulevard to the north, and Hillandale Road to the west.

1.3 LIST OF DRAWINGS

Contract includes the following Drawings:

No.	Drawing Title	Issue Date
1	Cover Sheet	1-28-2013
2	Rain Garden Plan View	1-28-2013
3	Rain Garden Cross Section and Profile	1-28-2013
4	Rain Garden Inlet Details	1-28-2013
5	Rain Garden Details	1-28-2013
6	Rain Garden Planting Schedule	1-28-2013
7	Rain Garden Planting Plan: 50 SF With Partial Shade	1-28-2013
8	Rain Garden Planting Plan: 50 SF With Full Sun	1-28-2013
9	Rain Garden Planting Plan: 75 SF With Partial Shade	1-28-2013
10	Rain Garden Planting Plan: 75 SF With Full Sun	1-28-2013
11	Rain Garden Planting Plan: 150 SF With Partial Shade	1-28-2013
12	Rain Garden Planting Plan: 150 SF With Full Sun	1-28-2013
13	Rain Garden Tree Planting Details	1-28-2013
14	Tree Planting Schedule	1-28-2013
	Tree Planting Details	1-28-2013

1.4 SUBSURFACE INVESTIGATION REPORT

- A. No subsurface investigation was conducted for the Sites included in the Contract.

1.5 TOPOGRAPHIC SURVEY

- A. A No topographic survey was conducted for the Sites included in the Contract.

1.6 EXISTING CONDITIONS SURVEY

- A. No existing conditions survey was conducted for the Sites included in the Contract.

B. CITY OF DURHAM STANDARDS

- C. All Work shall conform to City of Durham Standards. City of Durham Street Construction Specifications and Water and Sewer Construction Specifications may be downloaded at: <http://www.durhamnc.gov/departments/works/engineering.cfm>.

- D. The City of Durham Street Construction Specifications are amended as indicated below.

1. Revise Paragraph 9, Sampling and Testing of Materials and Construction on page 7 as follows:
  - a. The Contractor is to comply with material submittal and approval requirements as outlined elsewhere in these specifications. The Contractor is responsible for performing the required control testing for this Project to demonstrate compliance with contract requirements as outlined in these specifications or with specifications incorporated into

- this Contract by reference. The City may perform, or cause to be performed by independent laboratory services, quality assurance testing of the testing that will be performed by the Contractor.
2. Replace in its entirety Paragraph 14B concerning Accident Prevention on page 9 with the following:
    - a. The Contractor shall be solely responsible for all safety precautions required to complete the work. The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the Site, which occur as a result of his prosecution of the Work. The safety provisions of applicable laws and building and construction codes shall be observed. Machinery, equipment and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws. The Contractor shall remain responsible for the safety and protection of the Work until the Work is completed and accepted by the City.
  3. Replace in its entirety the Section 1 concerning Mobilization and Payment on page 23 with the following:
    - a. MOBILIZATION, PROGRESS SCHEDULE AND DE-MOBILIZATION:

The total cost Bid for mobilization, schedule and de-mobilization is not to exceed ten percent (10%) of the total Contract Bid. All costs for mobilization and de-mobilization shall be included in the Contract unit price. There shall be no additional compensation for mobilization and no adjustments to the unit prices based on changes in the scope of work, including, but not limited to, any additions to the Work on the Contract. The Contractor will be paid in increments based on the status of the actual mobilization effort. An amount equal to fifteen percent (15%) of the total mobilization cost shall be withheld until the physical completion of the Project and completion of punch-list items and removal of all equipment and temporary construction for project de-mobilization is complete. An amount equal to twenty percent (20%) of the total mobilization cost shall be withheld for payment of the progress schedule development and monthly updates as outlined in this Contract. The breakdown of this bid item is as follows:

      - a) Mobilization installments: a total of sixty-five percent (65%)
      - b) Schedule submission and updates: a total of twenty percent (20%)
      - c) De-mobilization and completion of punch list: a total of fifteen percent (15%)
    - 2) Any amount that the Contractor has bid in excess of the amounts noted above shall be retained by the City and paid on the final payment estimate.
  4. All provisions which are not amended remain in effect.

- E. The City of Durham Water and Sewer Construction Specifications are amended as indicated below.
1. Replace in its entirety Paragraph 17 concerning Public Convenience and Safety, subparagraph A, entitled "Contractor's Responsibility" on page 2-10 with the following:
    - a. The Contractor will handle the construction Work in such a manner as to maintain traffic on the main roads along the construction area and will provide and maintain such warning signs and barricades as may be necessary to protect the Work and the public in their use of the highway itself, and in no case will the City of Durham be responsible for any failure of the Contractor to provide such warnings and precautions. The Contractor shall protect, indemnify, and save harmless the City of Durham from any and all claims, expenses, or damages which might be incurred as a result of accidents. All signs and barricades shall meet the minimum requirements of and conform to the standard outline in the manual entitled "Manual on Uniform Traffic Control Devices for Streets and Highways" (current edition), published by the United States Department of Transportation, Federal Highway Administration, current version. The Contractor shall coordinate traffic control with the North Carolina Department of Transportation and Highway Safety.
  2. Replace in its entirety Paragraph 18 concerning Accident Prevention, subparagraph A, on page 2-11 with the following:

The Contractor shall be solely responsible for all safety precautions required to complete the Work. The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the Site, which occur as a result of his prosecution of the Work. The safety provisions of applicable laws and building and construction codes shall be observed. Machinery, equipment and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws. The Contractor shall remain responsible for the safety and protection of the work until the work is completed and accepted by the City.
  3. All provisions which are not amended remain in effect.

1.7 NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (NCDENR) STANDARDS

1. All work shall conform to the NCDENR Erosion and Sediment Control Planning and Design Manual (current version), as referenced in the Technical Specifications. The NCDENR manual may be downloaded at: <http://portal.ncdenr.org/web/lr/publications>. Hard copies of this document may be obtained from the NCDENR and are not provided by the City of Durham.

END OF DOCUMENT

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DOCUMENT 00 41 43  
BID FORM - UNIT PRICE (SINGLE-PRIME CONTRACT)

To: The City of Durham, North Carolina  
c/o Laura Webb Smith  
Public Works Department  
101 City Hall Plaza  
Durham, North Carolina 27701

Date: .....

Contract: 10-013

Project: Durham Rain Catchers

Sites: The Work Sites for this Contract include, but are not limited to, the residential area approximately encompassed by West Main Street to the south, Watts Street to the east, Club Boulevard to the north, and Hillandale Road to the west.

Name of Bidder: .....

Address of Bidder: .....

.....

.....

Phone Number of Bidder: .....

Contact Person for Bidder: .....

Phone Number of Contact: .....

Bidder's North Carolina General Contractor's License Number: .....

1. OFFER

The undersigned Bidder hereby declares that the names of all persons interested in this Bid as principals appear in the blank spaces hereinafter provided for such purpose, that this Bid is in all respects fair and without collusion, that the Bidder has examined the locations of the proposed Work, the Advertisement, the Instructions to Bidders, the Technical Specifications, SDBE requirements of the Department of EO/EA of the City of Durham, the Contract Documents and bond forms, and the Drawings therein referred to and fully understands the same and agrees and accepts the terms and conditions thereof, that it is understood that the estimated quantities are approximate only and are given for the purpose of comparing Bids upon a uniform basis, and that said estimate shall in no way affect the unit prices for the Work. The undersigned Bidder hereby agrees to furnish at the Bidder's cost the expense of all the necessary labor, tools, apparatus, machinery, equipment, transportation, and all other things which may be required to fully and properly perform all the terms, covenants, provisions, and agreements of the annexed Contract.

The undersigned hereby agrees to do said Work and furnish said materials as prescribed in the Contract Documents and Technical Specifications, and, according to the Drawings and

requirements of the Engineer under said Contract Documents and Technical Specifications, in a first-class manner and to the best of the undersigned's ability at the following unit prices.

Having examined the Site of the Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by the Engineer for the Project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the unit prices listed in this Bid form in lawful money of the United States of America.

We have included the Bid security as required by the Instruction to Bidders.

All applicable federal taxes are included and State of North Carolina taxes are excluded from the unit prices.

## 2. ACCEPTANCE

This offer shall be open to acceptance and is irrevocable, except as required by law, for ninety (90) days from the Bid opening date.

If this Bid is accepted by the City of Durham within the time period stated above, we will:

- Execute the Agreement within fifteen (15) days of receipt of Notice of Award.
- Furnish the required bonds within fifteen (15) days of receipt of Notice of Award.
- Commence Work within ten (10) days after written Notice to Proceed.

If this Bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required bonds, the Bid security shall be forfeited as damages to the City of Durham by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this Bid and the Bid upon which a Contract is signed.

In the event our Bid is not accepted within the time stated above, the required security deposit will be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

## 3. CONTRACT TIME

If this Bid is accepted, we will:

- Complete the Work in 200 calendar days from Notice to Proceed.

## 4. UNIT PRICES

Contract: 10-013

Project: Durham Rain Catchers

The following are unit prices for specific portions of the Work as listed. The unit price Bid for items in this Contract are for furnishing, installing all items of Work as indicated on the Drawings

and Technical Specifications, complete, in place and accepted, per the City of Durham Standards and Specifications, North Carolina Department of Transportation (NCDOT) Standards and Specifications, and the North Carolina Department of Environment and Natural Resources (NCDENR) Erosion and Sediment Control Planning and Design Manual. The following is the list of unit prices:

Item	Section	Item Description	Quantity	Unit	Unit Price	Total
1	-	Mobilization	1	LS		
Written Item Value:						
2	312000	Earth Moving	606	CY		
Written Item Value:						
3	329219	Planting Fescue or Resodding the Berm	51	EA		
Written Item Value:						
4	329323.33	Rain Garden Plants and Planting				
		Shrubs	162	EA		
		Herbaceous Perennial Species	2,260	EA		
Written Item Value:						
5	329343	Trees				
		small	32	EA		
		medium	23	EA		
		large	1	EA		
Written Item Value:						
6	334616.19	Gutter Connection to Rain Garden				
		Above-ground Pipe Connection	596	FT		
		Below-ground Pipe Connection	820	FT		
Written Item Value:						
7	334727.12	Triple Shredded Hardwood Mulch	66	CY		
Written Item Value:						
8	334727.13	Rain Garden Media	300	CY		
Written Item Value:						
9	334727.14	2"-6" Cobble	12	CY		
Written Item Value:						
Total Amount For Contract:						

We agree to diligently perform the Work in accordance with all Contract Documents, to complete such Work within the period as outlined in the Contract, and to begin Work within ten (10) days after receipt of the Notice to Proceed from the Engineer.

5. ADDENDA

The following Addenda have been received. The modifications to the Bidding Documents noted below have been considered and all costs are included in the Bid.

Addendum No.: ....., Dated: .....                      Addendum No.: ....., Dated: .....

Addendum No.: ....., Dated: .....                      Addendum No.: ....., Dated: .....

Addendum No.: ....., Dated: .....                      Addendum No.: ....., Dated: .....

6. APPENDICES

The following Documents will be submitted to the Issuing Office within five (5) days after the Bid opening:

1. Non-Collusion Affidavits of all Subcontractors
2. Privilege Licenses of all Subcontractors (contact the City of Durham, Department of Finance, Treasury Management Division, (919) 560-4700 for information on securing privilege licenses)

The following information is included with Bid submission:

1. Bid Form
2. SDBE Procurement Form
3. Contractor Safety Evaluation Form
4. Non-Collusion Affidavit of Bidder (see Appendix E for blank affidavits)
5. Privilege License of Bidder (contact the City of Durham, Department of Finance, Treasury Management Division, (919) 560-4700 for information on securing privilege licenses)
6. Bid Security (see Appendix F for blank Bid bond forms)
7. List of Contractor Equipment and Personnel

7. CONTRACTOR EXPERIENCE

The undersigned Contractor has constructed .....bioretention cells and/or rain gardens in the past three years.

The undersigned Contractor has regularly engaged in contract work of this class for ..... years, and has executed the following work as principal(s):

.....

.....

.....

.....

.....

The undersigned Contractor has performed the following projects in residential, private homeowner properties (include photographs):

.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

.....

.....

List of Contractor's personnel experienced to do this Work including and designating the Superintendent to be in charge of this Work showing the length of their varied experience with this particular Work. The list shall not include Subcontractor personnel.

Name	Experience	Name	Experience
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

List of Contractor's equipment in good condition and suitable for completion of this Contract. Contractor must be able to demonstrate ownership of all equipment necessary to complete all portions of the Contract. The list shall not include Subcontractor equipment.

.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

**Please attach additional sheets as necessary to complete the items above.**

8. BID FORM SIGNATURES

Refer to Document 00 21 15 for specific Bid form signature requirements for corporations, partnerships, limited liability companies, individuals, or sole proprietorships.

CORPORATION

The Corporate Seal of

.....  
 (Bidder - print the full corporate name of firm)

.....  
 (President/Vice President/Authorized Corporate Officer)

(Seal)

was hereunto affixed in the presence of:

.....  
(Secretary/Assistant Secretary)

(Seal)

Corporate Address:

.....  
.....  
.....  
.....

(State of Incorporation)  
LIMITED LIABILITY COMPANY

.....  
(Bidder - print the full name of firm)

.....  
(Authorized Firm Member)

(Seal)

was hereunto affixed in the presence of:

.....  
(Witness)

(Seal)

Firm Address:

.....  
.....  
.....

.....  
(State of Formation)

INDIVIDUAL OR SOLE PROPRIETORSHIP

.....  
(Bidder - print the full name of individual or sole proprietorship)

(Seal)

Individual or Sole Proprietorship Address:

.....  
.....  
.....



JOINT VENTURE

If the Bid is a joint venture, add additional forms of execution for each member of the joint venture in the appropriate manner using the forms from above.

END OF DOCUMENT

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DOCUMENT 00 52 15

AGREEMENT FORM - EJCDC STIPULATED SUM (SINGLE-PRIME CONTRACT)

THIS AGREEMENT is by and between the City of Durham (Owner), a North Carolina municipal corporation, and \_\_\_\_\_ (Contractor).

The City of Durham and Contractor, in consideration of the mutual covenants set forth herein, agree as follows:

1.1 WORK

Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The Work involves the furnishing of all materials, labor, equipment, tools, etc. unless otherwise specified, for the complete installation of repairs, rehabilitation, and improvements of stormwater drainage systems at various site locations throughout the City of Durham.

1.2 THE PROJECT

- A. The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

Contract: 10-013, Project: Durham Rain Catchers

- B. Listed below are the number of rain gardens and the number of trees to be planted, that the Contractor may be instructed to install under this Contract.

1. Rain Gardens - 51
2. Trees - 56

1.3 ENGINEER

- A. The Project has been designed by Biohabitats, Inc. (Engineer), who is to act as the City of Durham's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

1.4 CONTRACT TIMES

- A. Time of the Essence
1. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- B. Days to Achieve Substantial Completion and Final Payment
1. The Work shall be substantially completed within 200 days after the date when the Contract Times commence to run (Notice to Proceed) as provided in

2. Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within 200 days after the date when the Contract Times commence to run (Notice to Proceed).

C. Liquidated Damages

1. Contractor and the City of Durham recognize that time is of the essence of this Agreement and that the City of Durham will suffer financial loss if the Work is not completed within the times specified in Paragraph 1.4.B.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by the City of Durham if the Work is not completed on time. Accordingly, instead of requiring any such proof, the City of Durham and the Contractor agree that as liquidated damages for the delay (but not as a penalty), Contractor shall pay the City of Durham four hundred dollars (\$400.00) for each day that expires after the time specified in Paragraph 1.4.B.1 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by the City of Durham, Contractor shall pay the City of Durham four hundred dollars (\$400.00) for each day that expires after the time specified in Paragraph 1.4.B.1 for completion and readiness for final payment until the Work is completed and ready for final payment.
2. Failure of the Contractor to commence construction within ten (10) days of the Notice to Proceed shall begin a daily penalty to the Contractor at a rate of fifty percent (50%) of the daily liquidated damages specified in Paragraph 1.4.C.1.

D. Weather Related Delays

1. The Contractor may request for an extension of Contract Times for delays related to adverse weather as described in the General Conditions, Paragraph 12.02A.

1.5 CONTRACT PRICE

- A. The City of Durham shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amount determined pursuant to Paragraphs 1.5.A.1 and 1.5.A.2 below:

For all Work other than Unit Price Work, a Lump Sum of: Note: No lump some work is included in the Contract.

All specific cash allowances are included in the above price and have been computed in accordance with Paragraph 11.02 of the General Conditions.

1. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in this Paragraph 1.5.A.2:

As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are

to be made by the Engineer as provided in Paragraph 9.07 of the General Conditions. Unit prices have been computed as provided in Paragraph 11.03 of the General Conditions.

UNIT PRICE WORK

Item	Section	Item Description	Quantity	Unit	Unit Price	Total
1	-	Mobilization	1	LS		
Written Item Value:						
2	312000	Earth Moving	606	CY		
Written Item Value:						
3	329219	Planting Fescue or Resodding the Berm	51	EA		
Written Item Value:						
4	329323.33	Rain Garden Plants and Planting				
		Shrubs	162	EA		
		Herbaceous Perennial Species	2,260	EA		
Written Item Value:						
5	329343	Trees				
		small	32	EA		
		medium	23	EA		
		large	1	EA		
Written Item Value:						
6	334616.19	Gutter Connection to Rain Garden				
		Above-ground Pipe Connection	596	FT		
		Below-ground Pipe Connection	820	FT		
Written Item Value:						
7	334727.12	Triple Shredded Hardwood Mulch	66	CY		
Written Item Value:						
8	334727.13	Rain Garden Media	300	CY		
Written Item Value:						
9	334727.14	2"-6" Cobble	12	CY		
Written Item Value:						
Total Amount For Contract:						

1.6 PAYMENT PROCEDURES

- A. Submittal and Processing of Payments
  - 1. Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
  
- B. Progress Payments; Retainage
  - 1. The City of Durham shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the first day of each month during performance of the Work as provided in Paragraphs 1.6.B.1.a through 1.6.B.1.e below. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units

2. completed) or, in the event there is no schedule of values, as provided in the General Requirements:
- a. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amount as Engineer may determine or the City of Durham may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions.
  - b. The City of Durham will retain five (5) percent of the amount of each estimate until Work covered by the Contract is fifty percent (50%) complete. If after the Project is deemed fifty percent (50%) complete based upon the Contractor's gross Project invoices, excluding the value of materials stored on and off-site, and the Contractor provides the City and the Engineer the following:
    - 1) Written verification evidencing fifty percent (50%) completion of the Project; and,
    - 2) Written consent of the surety named in the Project performance and payment bonds agreeing that the City shall not retain any further retainage from periodic payments due to the Contractor; the City shall cease holding retainage from future periodic payments if the City finds that the Contractor is performing satisfactorily, and any nonconforming Work identified in writing by the Engineer or City (prior to the point of fifty percent (50%) Project completion) has been corrected by the Contractor and accepted by the Engineer or City, whoever provided such prior notice of nonconforming Work. If, however, the City determines the Contractor's performance is unsatisfactory, the City may reinstate the specified retainage for each subsequent periodic payment. Notwithstanding anything to the contrary, City may assess retainage after fifty percent (50%) project completion, even if the Contractor has complied with Paragraphs 1.6.B.1.b.1 and 1.6.B.1.b.2 (above) and continues to perform satisfactorily as necessary to retain two and one-half percent (2.5%) total retainage through the completion of the Project. Notwithstanding any of the retainage provisions described herein, there shall be no retainage on periodic or final payments for Contracts having a total project cost less than \$100,000.00, and, in addition to the retainage amounts allowed to be held by the City of Durham, the City shall also retain all rights allowed under this Agreement to withhold payment to the Contractor in accordance with Article 14 of the General Conditions and for unsatisfactory job progress, defective or nonconforming construction not remedied, disputed Work, or third-party claims filed against the City of Durham or reasonable evidence that a third-party claim will be filed.
  - c. Within sixty (60) days of receipt by City of (1) an Application for Payment and (2) written consent of the surety, and after City has either (1) received a certificate of Substantial Completion or (2) received beneficial occupancy or use of the Project (if applicable), the City of Durham shall pay an amount sufficient to increase total payment to Contractor to the Contract Price, less such amounts as Engineer shall

- d. determine in accordance with Paragraph 14.02.B.5 of the General Conditions, including up to two hundred fifty percent (250%) of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

C. Final Payment

1. Prior to issuing final payment, the Contractor will furnish to the City of Durham certification that: All Subcontractors and vendors associated with this Contract have been paid; no liens and/or lawsuits have been placed against the Contractor for this Work; and the total dollar amount has been paid to all Subcontractors, Suppliers, and others associated with this project.
2. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, the City of Durham shall pay the remainder of the Contract price as recommended by Engineer as provided in said Paragraph 14.07.

1.7 NOT USED

1.8 CONTRACTOR'S REPRESENTATIONS

- A. In order to induce the City of Durham to enter into this Agreement Contractor makes the following representations:
1. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
  2. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and regulations that may affect cost, progress, and performance of the Work.
  3. Contractor has carefully studied all:
    - a. Reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in Paragraph 4.02 of the General Conditions; and
    - b. Reports and drawings of a Hazardous Environmental Condition, if any, at the Site which has been identified in Paragraph 4.06 of the General Conditions.
  4. Contractor has obtained and carefully studied (or assumes responsibility for doing so) all additional and supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by the Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto.
  5. Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work

6. at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
7. Contractor is aware of the general nature of work to be performed by the City of Durham and others at the Site that relates to the Work as indicated in the Contract Documents.
8. Contractor has correlated the information known to the Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

## 1.9 CONTRACT DOCUMENTS

### A. Contents

1. The Contract Documents consist of the following:
  - a. This Agreement (pages 1 to \_\_\_\_, inclusive). Performance and Payment bonds (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
  - b. General Conditions (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
  - c. Technical Specifications as listed in the table of contents of the Project Manual.
  - d. Drawings consisting of \_\_\_\_\_ sheets with each sheet bearing the following general title: \_\_\_\_\_ and as listed on the attached sheet index.
  - e. Addenda (numbers \_\_\_\_ to \_\_\_\_, inclusive).
  - f. Exhibits to this Agreement (enumerated as follows):
    - 1) Contractor's Bid (Appendix I).
    - 2) Contract Certificates of Liability/Insurance (Appendix J).
    - 3) City of Durham, Certificate of Finance Officer (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
    - 4) Non-Collusion Statement by Contractor (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
    - 5) Documentation submitted by Contractor prior to Notice of Award (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
  - g. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
    - 1) Notice to Proceed.
    - 2) Work Change Directives.
    - 3) Change Order(s).

B. The documents listed in Paragraph 1.9.A.1 are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Paragraph 1.9.A.1.

- D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.
- E. Coordination of General Conditions, Supplementary Conditions, Agreement, and Technical Specifications
  - 1. All components of the Contract Documents are essential elements of the Contract between the Owner and Contractor, and notwithstanding the requirements of Paragraph 3.03 of the General Conditions, in case of a conflict or contradiction among the General Conditions (including Supplementary Conditions), Agreement, and Technical Specifications, the following shall be the order of controlling authority as among these documents: The Technical Specifications shall control over the Agreement and the Agreement shall control over the General Conditions (including Supplementary Conditions).

#### 1.10 MISCELLANEOUS

- A. Terms
- B. Terms used in this Agreement will have the meanings stated in the General Conditions.
- C. Assignment of Contract
  - 1. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- D. Successors and Assigns
  - 1. The City of Durham and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.
- E. Severability
  - 1. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the City of Durham and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- F. Notices and Communications

G.

1. All notices and other communications required or permitted by Contract shall be in writing and shall be given by personal delivery, fax, or certified United States mail (return receipt requested) addressed/faxed as follows:

To the City of Durham (Owner):  
Attention: Laura Webb Smith  
City of Durham  
Department of Public Works  
Stormwater Services Division  
101 City Hall Plaza  
Durham, North Carolina 27701  
(919) 560-4326

To the Contractor:  
Attention: [\_\_\_\_\_]  
[Firm Number]

[Street Address]

[City, State Zip Code]

[Fax Number]

2. A change of address, fax number, or person to receive notices or communications may be made by either party by notice given to the other party. Any notices or communications under Contract shall be deemed given at the time of actual delivery, if it is personally delivered or faxed. If the notices or communications are sent by United States mail, it shall be deemed given upon the third calendar day following the day on which the notices or communications were postmarked, or upon actual delivery, whichever first occurs.

H. Other Provisions

I. Technical Data and Other Work

1. Subsurface and Physical Conditions
  - a. No reports of explorations or tests of subsurface conditions at or contiguous to the Site are known to the City of Durham or Engineer.
2. Hazardous Environmental Condition
  - a. No reports or drawings related to Hazardous Environmental Condition are known to the City of Durham or Engineer.
3. Other Work
  - a. The City of Durham and Engineer are unaware of any other work on the Site at the time of Notice to Proceed.

J. Contractor's Liability Insurance

1. Workers compensation insurance shall cover employers' liability, \$1,000,000.

2. Automobile liability insurance shall have a combined single limit not less than \$2,000,000 per occurrence.
3. The policies of insurance required by Paragraph 5.04 of the General Conditions shall have a combined single limit not less than \$2,000,000 per occurrence; aggregate limit not less than \$4,000,000 per year.
4. Professional liability insurance coverage self-insured retentions/deductibles in excess of \$25,000 must be approved by the City Finance Director.
5. Professional liability insurance coverage shall have a combined single limit not less than \$1,000,000 per claim applicable to this Contract.

K. Performance of Private Work in Conjunction with Contract

1. The Contractor shall not perform work for private citizens or agencies in conjunction with this project or within the project limits of this contract. Any other work performed by the Contractor within the vicinity of the project limits shall be completed prior to mobilizing to the subject site or after substantial completion and demobilization from the project site.

CERTIFICATE OF FINANCE OFFICER

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

This ..... day of ....., .....

.....  
FINANCE OFFICE, CITY OF DURHAM

NON-COLLUSION STATEMENT BY CONTRACTOR

The City of Durham prohibits collusion, which is defined as a secret agreement for a deceitful or fraudulent purpose.

I, ....., affirm that I have not engaged in collusion with any City employee(s), other person, corporations, or firms relating to this Bid, proposals, or quotations. I understand collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards.

.....  
CONTRACTOR

ATTEST:

CITY OF DURHAM

\_\_\_\_\_

By: \_\_\_\_\_

preaudit certificate, if applicable \_\_\_\_

Address for giving notices:

Attention: Laura Webb Smith  
City of Durham  
Department of Public Works  
Stormwater Services Division  
101 City Hall Plaza  
Durham, North Carolina 27701  
(919) 560-4326

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CONTRACTOR (CORPORATION):

.....  
.

By: .....

Title: .....

(CORPORATE SEAL)

Attest: .....

Title: .....

(CORPORATE SEAL)

Address for giving notices:

.....  
.

.....  
.

.....  
.

Phone No.: .....

Fax No.: .....

License No.: .....

Agent for service or process: .....

.....

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

State of .....

ACKNOWLEDGMENT BY CORPORATION

County of .....

I, a notary public in and for the aforesaid county and state, certify that .....  
personally appeared before me this day and stated that he or she is

***(Strike through the inapplicable:)*** chairperson/ president/ chief executive officer/ vice-president/  
assistant vice-president/ treasurer/ chief financial officer of

[contractor], a corporation, and that by authority duly given and as the act of the corporation, he or she  
signed the foregoing contract or agreement with the City of Durham and the corporate seal was affixed  
thereto. This the ..... day of ....., 20.....

My commission expires: .....

.....

Notary Public

END OF DOCUMENT

DOCUMENT 00 72 15

GENERAL CONDITIONS - EJCDC STIPULATED SUM (SINGLE-PRIME CONTRACT)

1.1 SUMMARY

A. Document Includes:

1. General Conditions.
2. Supplemental Conditions.

B. Related Documents:

1. Document 00 52 15 - Agreement Form - EJCDC Stipulated Sum (Single-Prime Contract).

1.2 GENERAL CONDITIONS

- A. EJCDC No. C-700 (2002 Edition) - Standard General Conditions of the Construction Contract, is the General Conditions of the Contract.

END OF DOCUMENT

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This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

**ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE**

and

Issued and Published Jointly By



PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE  
*a practice division of the*  
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

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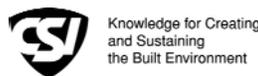
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The Associated General Contractors of America



Construction Specifications Institute

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1015 15th Street, N.W., Washington, DC 20005

American Society of Civil Engineers  
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City of Durham, Department of Public Works  
101 City Hall Plaza, Durham, NC 27701

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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## GENERAL CONDITIONS

### ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

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#### 1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

9A. *City*--The City of Durham, North Carolina.

9B. *City Council*--The City Council of the City of Durham, North Carolina.

9C. *City Manager*--The City Manager of the City of Durham, North Carolina.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

17A. Document--A specific section of the Project Manual or a reference to a specific section of the Project Manual as noted with the accompanying numeric reference.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

23A. Issuing Office--The office from which the Bidding Documents are to be issued and where the Bidding procedures are to be administered.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Con-

tract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed. The Owner is the City of Durham, North Carolina. The City Manager is hereby designated as Owner's representative. The City Manager is the only individual authorized to act on Owner's behalf under or in connection with the Contract Documents, unless the City Manager designates a new representative in writing. The authority of the City Manager and designated representative(s), if any, includes terminating or suspending Work under Article 15 and executing changes in the Work under Article 10.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

31A. *Products*--Means, materials, and equipment that Contractor furnishes and provides, other than labor and services.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

34A. Property Owner--The individual, partnership, co-partnership, limited liability corporation, firm, company, corporation, unincorporated association, organization, joint stock company, trust, estate, institution, governmental entity, or any other entity that owns the property, or controls management or activities of the property where Work or a portion of the Work is performed.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof to make any and all inspections of the Work performed, acting under direct supervision of the Engineer.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer and approved by Owner, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be lawfully utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

46A. Superintendent--The authorized representative of the Contractor who is assigned to oversee the work forces responsible for performing the Work in accordance with the Contract Documents.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order

following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

## 1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

### B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

### C. Day

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

### D. Defective

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents, or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
- c. has been damaged prior to Engineer’s - recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

### E. Furnish, Install, Perform, Provide

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

### G. Include

1. The word “include” in its various forms and derivatives shall mean ‘without limitation’ unless the context otherwise requires.

### H. Persistently Fails

1. The expression ‘persistently fails’ and other similar expressions, as used in reference to the Contractor, shall mean any act or omission which causes Owner or Engineer to reasonably conclude that Contractor will not complete the Work within the Contract Times or Contract Price, or in substantial compliance with the requirements of the Contract Documents.

### I. Pronouns, Numbers, and Titles

1. Unless the context otherwise requires, all personal pronouns used in the Contract Documents shall include all other genders, and the singular shall include the plural and vice versa. Titles and headings of articles, paragraphs, subparagraphs, sections, subsections, parts, subparts, etc., in the Contract Documents are for convenience only, and neither limit nor amplify the provisions.

## ARTICLE 2 - PRELIMINARY MATTERS

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### 2.01 *Delivery of Bonds and Evidence of Insurance*

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in ~~the Supplementary Conditions Article 5,~~ certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

### 2.02 *Copies of Documents*

~~A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.~~

A. The City of Durham shall furnish drawings and Project Manual to Contractor in electronic format. The cost of reproduction shall be the responsibility of the Contractor.

### 2.03 *Commencement of Contract Times; Notice to Proceed*

~~A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.~~

A. The Contract Times will commence to run on the thirtieth (30<sup>th</sup>) day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty (30) days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the thirtieth (30<sup>th</sup>) day after the execution of the Contract by the City of Durham, Office of the City Manager.

### 2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

### 2.05 *Before Starting Construction*

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

B. *Priority List of Sites:* The priority list of Sites for the Project shall be approved by the Engineer or Resident Project Representative. The City of Durham reserves the right to alter the priority list of Sites. The Contractor shall be given notice in writing of any change in the priority list of Sites.

### 2.06 *Preconstruction Conference*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

### 2.07 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or

progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

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3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

D. The General Requirements govern the execution of the Work of all sections of the Technical Specifications of the Contract Documents.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees

from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

a. The accuracy or exactness of grades, elevations, dimension, or locations given on any Drawings or the Work installed by other contractors, is not guaranteed by Owner.

b. Included under Contractor's duty under the first sentence of Paragraph 3.03.A.1 are:

1) to satisfy itself as to the accuracy of all grades, elevations, dimensions, and locations, and

2) in all cases of interconnection of the Work to be done by Contractor with the rest of the Project, it shall verify at the Site all dimensions needed to make proper interconnections.

c. Contractor shall promptly rectify all errors due to its failure to so verify all such grades, elevations, locations, or dimensions without additional cost to Owner. No extra charge or compensation shall be allowed on account of differences between actual dimensions and the dimensions indicated on the Drawings.

d. Contractor acknowledges:

1) the Contract Documents are sufficient to determine the cost of the Work;

2) it has had sufficient opportunity to visit the Site and to examine all conditions, including subsurface and physical conditions, affecting the Work;

3) it has had a sufficient opportunity to examine the Contract Documents for errors, inconsistencies, and omissions;

4) the Contract Documents are complete and unambiguous;

5) the Contract Times are reasonable and sufficient to complete the Work.

e. If the statements in Paragraph 3.03.A.1.d are not accurate, Contractor accepts any risk in connection with making them.

f. Contractor shall evaluate and satisfy itself as to the conditions and limitations under which the Work is to be performed, including (to the extent they are pertinent):

1) the location, condition, layout, and nature of the Site and surrounding areas,

2) generally prevailing climatic condition,

3) anticipated labor supply and costs,

4) availability and cost of materials, tools, and equipment, and

5) other similar issues.

g. To the extent that it may be appropriate for the proper execution of its subcontract, Contractor shall cause each Subcontractor to do the evaluation described in Paragraph 3.03.A.1.f.

h. Owner shall not be required to make any adjustment in with the Contract Times or the Contract Price in connection with any failure by Contractor to comply with Paragraph 3.03.A.

## *2. Contractor's Review of Contract Documents*

*During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known

thereof or unless otherwise provided in the Contract Documents, or by Laws or Regulations or common law.

## B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

2. Owner and Contractor shall do all acts, and shall make, execute, and deliver such written instruments, as shall from time to time be reasonably required to carry out the provisions of the Contract Documents. If inconsistencies within or between parts of the Contract Documents, or between the Contract Documents and applicable standards, specifications, manuals, or Laws or Regulations cannot be resolved by use of provisions of the Contract Documents as described in Paragraph 3.03.B.1, Contractor shall:

a. provide the better quality or greater quantity of Work or

b. comply with the more stringent requirement.

3. Paragraph 3.03.B.2 shall not relieve the Contractor of any obligations otherwise imposed on it.

## 3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or

3. Engineer's written interpretation or clarification.

### 3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

### 3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

## ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

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### 4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

D. The City of Durham shall obtain a right-of-entry for each Site located on private property. No work shall commence on a private property Site until the Contractor has been given a copy of the executed right-of-entry for that Site and the Contractor has been given permission to begin work on the Site from the Engineer or Resident Project Representative. The City of Durham is solely responsible for obtaining rights-of-entry.

E. The Contractor shall have no more than one (1) uncompleted Site ongoing at any time, unless authorized by the Engineer or Resident Project Representative. Prior to moving to the next Site, the Contractor shall receive permission from the Engineer or Resident Project Representative.

F. The City of Durham shall obtain all encroachment agreements necessary for the completion of the Work. The Contractor shall become familiarized with all the provisions of the encroachment agreements, if any, required for Contract. The Engineer or Resident Project Representative will provide copies of the encroachment agreements. The City of Durham is solely responsible for obtaining encroachment agreements.

G. Public Notice and Advisory: The Contractor shall notify individuals or entities anticipated to be affected by the Work. Notice shall be written and provided to the recipient no less than two (2) days prior to commencing Site construction. Notice shall be delivered in person, door knob hanger, or letter and shall include the following information:

1. nature and schedule of the Work;
2. name and telephone number of a contact person; and
3. any additional necessary information or instructions.

H. The Engineer or Resident Project Representative shall approve any notice prior to commencement of construction.

#### 4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The ~~Supplementary Conditions—identify~~ Agreement, Paragraph 1.10.G.1 identifies:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and
2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such “technical data” is identified in the Supplementary Conditions. Except for such reliance on such “technical data,” Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any “technical data” or any such other data, interpretations, opinions, or information.

#### 4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any “technical data” on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
2. is of such a nature as to require a change in the Contract Documents; or
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer’s Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner’s obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer’s findings and conclusions.

#### C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor’s cost of, or time required for, performance of the Work; subject, however, to the following:

- a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
- b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

#### 4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in ~~the Supplementary Conditions~~ [Article 4](#):

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents,

c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

#### B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the ~~Supplementary Conditions Agreement, Paragraph 1.10.G.2,~~ for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such “technical data” is identified in the Supplementary Conditions. Except for such reliance on such “technical data,” Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any “technical data” or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner’s own forces or others in accordance with Article 7.

~~G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual’s or entity’s own negligence.~~

G. Nothing in this Paragraph 4.06 is intended to reduce Owner’s duties under the Contract Documents, including Article 8.

~~H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,~~

~~attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.~~

H. Nothing in this Paragraph 4.06 is intended to reduce Contractor's duties under the Contract Documents, including Article 6.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

## ARTICLE 5 - BONDS AND INSURANCE

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### 5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act. Furnish Performance and Payment Bonds on the bond forms included in Appendix G. Performance and Payment Bonds shall be executed by a surety licensed to do business in the State of North Carolina.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 five (5) days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

### 5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in ~~the Supplementary Conditions Article 5.~~

### 5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in ~~the Supplementary Conditions Article 5,~~ certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

~~B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.~~

B. Certificates of insurance shall be addressed to the City of Durham, North Carolina, Attention: Finance Director, 101 City Hall Plaza, Durham, North Carolina 27701.

C. Both the certificates of insurance and additional insured endorsement must be originals and must be approved by the City of Durham's Finance Director before Contractor can begin any Work under this Contract.

D. Failure of the City of Durham to demand such certificates or other evidence of full compliance with these insurance requirements or failure of the City of Durham to identify a deficiency from evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

E. By requiring such insurance and insurance limits herein, the City of Durham does not represent that coverage and limits will necessarily be adequate to protect Contractor, and such coverage and limits shall not be deemed as a limitation on Contractor's liability under the indemnities granted to the City of Durham in the Contract Documents.

### 5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain ~~such liability and other~~ commercial general liability insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which

may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

a. Workers compensation insurance shall cover statutory benefits.

b. Workers compensation insurance shall cover employees; cover Contractor's partners, officers, and relatives (who work on this Contract).

c. Workers compensation insurance shall cover employers' liability in the amount stipulated by the Agreement, Paragraph 1.10.H.1.

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

a. Automobile liability insurance shall cover owned, hired, or borrowed vehicles.

b. Automobile liability insurance shall cover employee vehicles, if used in performance of this Contract.

c. Automobile liability insurance limits shall be as stipulated in the Agreement, Paragraph 1.10.H.2.

7. claims for damages related to premises/operations.

8. claims for damages related to products/completed operations.

9. claims for damages related to broad form property damage.

10. claims for damages related to explosion, collapse, and underground hazards if the hazards exist in the performance of this Contract.

11. claims for damages related to contractual liability.

12. claims for damages related to independent contractors, if any are used in the performance of this Contract.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through ~~5.04.A.6~~ 5.04.A.12 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in ~~the Supplementary Conditions Article 5~~, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

a. City of Durham must be named additional insured, and an original of the endorsement to effect the coverage must be attached to the certificate (if by blanket endorsement, then agent may so indicate in the General Liability section of the certificate, in lieu of an original endorsement).

2. include at least the specific coverages and be written for not less than the limits of liability provided in ~~the Supplementary Conditions Article 5~~ or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in ~~the Supplementary Conditions Article 5~~ to whom a certificate

of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in ~~the Supplementary Conditions~~ Article 5, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

8. have a combined single limit and aggregate limit as stipulated in the Agreement, Paragraph 1.10.H.3.

9. be provided by companies authorized to do business in the State of North Carolina.

10. be provided by companies with Best rating A-VIII. Anything less requires written approval from the Owner.

C. In the event that claims in excess of the insured amounts provided herein are filed by reason of any operations under the Contract, the amount of excess of such claims, or any portion thereof, may be withheld from payment due or to become due the Contractor until such time as the Contractor shall furnish such additional security covering such claims as may be determined by the Owner.

D. All policies and certificates of insurance of the Contractor shall contain the following clauses:

1. Insurers shall have no right of recovery or subrogation against the Owner and its agents and agencies and the Engineer, it being the intention of the parties that the insurance policies so affected shall protect both parties and be primary coverage for any and all losses covered by the above described insurance.

2. The clause "other insurance provisions" in a policy in which the Owner and its agents and agencies and the Engineer is named as an insured, shall not apply to these parties.

3. The insurance companies issuing the policy or policies shall have no recourse against the Owner and its agents and agencies and the Engineer, for the payment of any premiums or for assessments under any form of policy.

4. Any and all deductibles in the above described insurance policies shall be assumed by and be for the amount of, and at the sole risk of the Contractor.

E. Contractor shall purchase and maintain professional liability covering architects and engineers employed or engaged by Contractor covering claim arising out of work in connection with this Contract.

1. Self-insured retentions/deductibles shall be as stipulated in the Agreement, Paragraph 1.10.H.4.

2. Combined single limit of insurance shall be as stipulated in the Agreement, Paragraph 1.10.H.5.

3. This insurance shall be maintained for six (6) years following the date of completion of the Work under this Contract.

F. Contractor shall cause each Subcontractor employed by the Contractor to purchase and maintain insurance of such types specified above. Valid certificates of insurance consistent with requirements of Article 5 shall be obtained by the Contractor and forwarded to the City prior to Contractor's use of Subcontractors in the performance of any aspect of this Contract.

#### ~~5.05 — Owner's Liability Insurance~~

~~A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.~~

#### ~~5.06 — Property Insurance~~

~~A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:~~

~~1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;~~

~~2. be written on a Builder's Risk "all risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;~~

~~3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);~~

~~4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;~~

~~5. allow for partial utilization of the Work by Owner;~~

~~6. include testing and startup; and~~

~~7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.~~

~~B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.~~

~~C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.~~

~~D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any~~

~~deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.~~

~~E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.~~

#### ~~5.07 Waiver of Rights~~

~~A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.~~

~~B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:~~

~~1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and~~

~~2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.~~

~~C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.~~

#### ~~5.08 Receipt and Application of Insurance Proceeds~~

~~A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.~~

~~B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.~~

#### 5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract

Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B, but failure to give such notice does not waive any rights. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

#### ~~5.10 Partial Utilization, Acknowledgment of Property Insurer~~

~~A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.~~

## ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

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### 6.01 Supervision and Superintendence

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or

received from the superintendent shall be binding on Contractor.

C. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, Owner and Contractor shall communicate through Engineer. Communications by and with Engineer's consultants shall be through Engineer.

#### 6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

#### 6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. Engineer may reject any material and equipment delivered to the Site without the approval of satisfactory evidence required by the Contract Documents.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

#### 6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07

as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

#### 6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

## 2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other

work on the Project) to adapt the design to the proposed substitute item; and

c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services;

4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

*B. Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2. The procedure for payment of expenses shall be similar to that provided in Paragraph 6.05.A.1.b.1.

*C. Engineer's Evaluation:* Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

*D. Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

*E. Engineer's Cost Reimbursement:* Engineer will record Engineer's costs in evaluating and implementing a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B

Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating and implementing each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

G. Any materials and equipment required to be approved by the Engineer that is installed on the Project without such approval is subject to removal, disposal, and replacement by the Contractor at Contractor's expense.

#### 6.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection. However, if the Contract Documents specify any item, process, or the like that is available only from an Subcontractor or Supplier against whom Contractor has an objection, the preceding sentence does not apply as to that particular Subcontractor or Supplier.

B. If ~~the Supplementary Conditions Article 6~~ requires the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with ~~the Supplementary Conditions Article 6~~, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate written agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. ~~Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer,, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same. Where appropriate, Contractor shall require~~

each Subcontractor or Supplier to enter into similar agreements with persons and firms that Subcontractor or Supplier has contracted with for any part of the Work.

H. Furnishing Subcontractor Documents: At any time after the Agreement is executed, whether or not notice of termination has been given, Contractor shall upon request of the Owner promptly give the Owner a copy of the entire text of all agreements, (including attachments and exhibits) with Subcontractors, together with all other documents by which any services, materials, equipment, or other goods were ordered by the Contractor, including documents showing the cost, delivery dates, and all terms and conditions (including those relating to ordering and canceling).

I. Partial Requirements of Subcontracts: All subcontracts shall include substantially the following Paragraphs 6.06.I.1 and 6.06.I.2. Upon Owner's request, Contractor shall demonstrate compliance with this Paragraph.

1. Paragraph 6.06.G of the General Conditions of the Construction Contract between Owner (City of Durham) and Contractor is incorporated by reference into this subcontract. To the extent of the Work to be performed by the Subcontractor, the rights of Owner and Engineer under the Owner-Contractor Agreement with respect to the Work to be performed by the Subcontractor are preserved and shall be protected so that subcontracting shall not prejudice those rights. Owner (City of Durham) is an intended third party beneficiary of this subcontract.

2. If Contractor is terminated by Owner, and even if Contractor defaults in such a way which would give the Subcontractor the right to terminate this subcontract, the Subcontractor hereby agrees that, upon written request (by Owner, or a contractor substituted in place of the original Contractor, or any surety obligated under bond relating to the Owner-Contractor Agreement), the Subcontractor will continue to perform its obligations under this subcontract (on the same terms and conditions as apply to this subcontract) for and on account of Owner, such substitute contractor, or the surety. If requested by Owner or surety, the Subcontractor shall execute a separate document to show its commitment to continue performance pursuant to this subcontract. Assignment is subject to the prior rights of the surety. Owner shall be responsible to the subcontractor only for those obligations of Contractor that accrue after Owner exercises any rights under this Paragraph.

J. The Contractor shall comply with all applicable provisions of Sections 18-50 through 18-54 of the City of Durham Code (Ordinance to Promote Equal Business Opportunities in City Contracting), as amended from time to time. Failure of Contractor to comply with these provisions shall be a material breach of Contract which may result in the rescission or termination of Contract and/or appropriate remedies in accordance with the provisions of the ordinance, Contract, and State law.

Section 18-59(f) of the ordinance provides, in part, "If the City Manager determines that the Contractor has failed to comply with the provisions of the Contract, the City Manager shall notify the Contractor in writing of the deficiencies. The Contractor shall have fourteen (14) days, or such time as specified in the Contract, to cure the deficiencies or establish that there are no deficiencies. If the deficiencies are not cured, the City shall have the right to take all lawful actions." These provisions apply only to alleged Contractor violations of Sections 18-50 through 18-54 of the City Code.

K. The Contractor shall meet all City of Durham requirements for affirmative action and Small Disadvantaged Business Enterprises (SDBE) participation. These requirements are detailed in Appendix A, SDBE Requirements and Construction Forms.

1. The Contractor shall submit form E-105 "Statement of Intent to Perform as Subcontractor" within five (5) days of the Bid opening for each Subcontractor intended to be counted towards the SDBE goals of the Contract.

2. All questions regarding SDBE documents or requirements may be directed to the City of Durham, Department of Equal Opportunity/Equity Assurance at (919) 560-4180.

L. A Privilege License for all Subcontractors shall be filed within five (5) days after the Bid opening. The Contractor and all Subcontractors shall obtain a City of Durham Privilege License from the Department of Finance, Treasury Management Division, located at 101 City Hall Plaza, Durham, North Carolina, (919) 560-4700.

M. The City of Durham or Engineer may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor or Supplier.

#### *6.07 Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights, trade secrets, proprietary information, or copyrights held by others, whether or not a particular invention, design, process, Product, or device is specified in the Contract Documents for use in the performance of the Work, and whether or not Engineer, or Owner, or the consultants, contractors, agents, and employees of either of them are aware of such patent rights, trade secrets, proprietary information, and copyrights. ~~If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual~~

~~knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.~~

~~B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.~~

#### 6.08 *Permits*

A. Unless otherwise provided in ~~the Supplementary Conditions~~ Article 6, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

#### 6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. ~~However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.~~

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on

the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

#### 6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

B. The Contractor will be reimbursed for all North Carolina Sales and Use Tax paid during any preceding month, at the time the monthly estimate is paid, provided they submit a sworn notarized statement itemizing the tax, showing each amount and to whom paid, and certifying that the articles purchased were used in Work performed for the City of Durham. State tax and County tax must be separated. Group amounts by County and provide a subtotal for each County. Amounts for items purchased outside of Durham County and delivered on-Site shall be grouped by County. One copy of all receipts/invoices must be provided for these amounts.

C. Reimbursable sales taxes as described below are to be excluded from unit prices.

1. Sales taxes are reimbursable if they were originally paid on purchases of building materials, fixtures, and equipment that become part of or annexed to any building or structure that is owned or leased by the City of Durham and is being erected, altered, or repaired for use by the City of Durham. Infrastructure (streets, sidewalks, sewer pipes, and water lines, etc.) is generally held to be "structure" so as to allow reimbursement for sales taxes paid on materials and fixtures that become a part of or are annexed to it. Examples of sales taxes that cannot be reimbursed include those paid for purchases such as scaffolding, tools, equipment repair parts, equipment rentals, forms for concrete, or fuel to operate machinery or equipment.

E. The Contractor may seek reimbursement at the same time as, or subsequent to, the Application for Payment is made for the properties that were taxed. The Contractor shall not file for reimbursement for sales taxes before the Contractor has the right to file an Application for Payment for properties that were taxed.

F. Sales taxes paid by Subcontractors should be detailed on the form "Reimbursable Sales and Use Tax Statement by Subcontractor" (see Appendix H). The Subcontractor completes and signs the form and provides the form to the Contractor. The Contractor submits all sales tax forms with the Contractor's pay application for the properties listed on that form. The City of Durham will make the reimbursement payable to the Contractor.

Except for the differences listed above, the answers to all questions on this page still apply whether the Subcontractor or the Contractor completes and signs the form.

G. Contractor shall include all requests for reimbursement of North Carolina Sales and Use with Applications for Payment. No Sales or Use taxes shall be reimbursed to the Contractor after Owner issues final payment.

#### 6.11 Use of Site and Other Areas

##### A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

~~3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.~~

3. As used in this Paragraph 6.11, 'occupant' includes any person, firm, or corporation, whether present as a licensee, invitee, lessee, or sublessee of any tier or level.

B. *Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work

and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger ~~it~~ the Work or adjacent property.

E. Where the Site is located on private property, Contractor shall take special care to restore the Site after construction is completed. All costs for this private property restoration shall be included in itemized unit prices. Restoration may include, but is not limited to, returning the Site to its original condition. Additional effort may be required to restore the Site. The Engineer or Resident Project Representative shall determine whether a Site has been adequately restored.

#### 6.12 Record Documents

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

#### 6.13 Safety and Protection

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

#### E. Existing Utilities

1. The City of Durham and Engineer have, to the best of their ability, shown the existing utilities and obstructions (water, sewer, electrical, gas, telephone, storm drainage, etc.) that may affect the Work. City of Durham Water & Sewer Construction Specifications require that Contractor shall, at Contractor's expense, locate all existing utilities that may be encountered during the Work. Contractor shall make every effort to avoid damage or disruption of services during the Work.

2. Contractor shall contact the North Carolina One Call Center to coordinate existing utility location prior to commencement of any Work.

a. North Carolina One Call Center, (800) 632-4949, [www.ncocc.org](http://www.ncocc.org).

#### 6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

#### 6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

#### 6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued. Contractor shall promptly report in writing to Owner and Engineer all accidents or incidents arising out of or in connection with the Work which cause death, personal injury, or property damage, giving full details and statements of any witnesses. In addition, if death, serious personal injury, or serious property damage is caused, Contractor shall report the accident or incident immediately by telephone or messenger to Owner and Engineer. Contractor shall give Owner and Engineer reasonable advance notice before using or placing explosives or other hazardous materials or equipment on the Site.

#### 6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

##### 1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples*: Contractor shall also submit Samples to Engineer for review and approval in accor-

dance with the acceptable schedule of Shop Drawings and Sample submittals.

- a. Submit number of Samples specified in the Specifications.
- b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

#### C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

- a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
- b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
- c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and
- d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a prominent specific notation made on each Shop Drawing or Sample

submitted to Engineer for review and approval of each such variation.

#### D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

#### E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall prominently direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

#### 6.18 *Continuing the Work*

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner, whether or not a Claim is pending. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, whether or not a Claim is pending, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 *Contractor's General Warranty and Guarantee*

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 *Indemnification*

~~A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work~~

~~itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.~~

A. To the maximum extent allowed by Laws and Regulations, Contractor shall defend, indemnify, and save harmless Indemnitees from and against all Charges that arise in any manner from, in connection with, or out of, performance of the Work as a result of acts or omissions of Contractor, any Subcontractor, any Supplier, or any person or organization directly or indirectly employed by any of them or any entity for whose acts any of them may be liable. In performing its duties under this Paragraph 6.20.A, Contractor shall at its sole expense defend Indemnitees with legal counsel reasonably acceptable to Owner.

~~B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.~~

B. Definitions: As used in Paragraph 6.20.A above and Paragraphs 6.20.C and 6.20.D below:

1. 'Charges' means claims, judgments, costs, damages, losses, demands, liabilities, obligations, fines, penalties, royalties, settlements, and expenses. Included within 'Charges' are:

a. interest and reasonable attorneys' fees assessed as part of any such item;

b. amounts for alleged violations of sedimentation pollution or other environmental or pollution laws and regulations -- including any such alleged violation that arises out of the handling, transportation, deposit, or delivery of the items or materials that are involved in performance of the Work;

c. amounts related to Hazardous Environmental Conditions; and

d. amounts related to alleged infringement of patent rights, trade secrets, proprietary information, or copyrights.

2. 'Indemnitees' means Owner and Engineer and the officers, officials, independent contractors, agents, and employees of Owner and Engineer, but does not include Contractor.

~~C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:~~

~~1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or~~

~~2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.~~

C. Limitations of Contractor's Obligation: Neither Paragraph 6.20.A nor any other provision of the Contract Documents shall be construed to require Contractor to indemnify or hold harmless Indemnitees against liability for damages arising out of bodily injury to persons or damage to property proximately caused by or resulting from the negligence, in whole or in part, of Indemnitees.

D. Nothing in Paragraphs 6.20.A, 6.20.B, or 6.20.C shall affect any warranties in favor of the Owner. This Paragraph 6.20.D is in addition to, and Paragraphs 6.20.A and 6.20.B above shall be construed separately from, any other indemnification provisions that may be in the Contract Documents. This Paragraph 6.20 shall remain in force despite termination of this Agreement (whether by expiration of the term or otherwise) and termination of the services of the Contractor under this Contract, but this sentence does not imply that other provisions in the Contract Documents do not survive termination.

#### 6.21 Delegation of Professional Design Services

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal

shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

## ARTICLE 7 - OTHER WORK AT THE SITE

### 7.01 Related Work at Site

~~A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:~~

~~1. written notice thereof will be given to Contractor prior to starting any such other work; and~~

~~2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.~~

A. Owner may perform other work at or affecting the Site by Owner's own forces or let other direct contracts therefor, or have other work performed at or affecting the Site by utility owners.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of

materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies not reasonably discoverable by said inspection in such other work.

#### 7.02 Coordination

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in ~~Supplementary Conditions~~ Article 7:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
2. the specific matters to be covered by such authority and responsibility will be itemized; and
3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in ~~the Supplementary Conditions~~ Article 7, Owner shall have sole authority and responsibility for such coordination.

#### 7.03 Legal Relationships

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

#### 7.04 Other Work

A. The Agreement, Paragraph 1.10.H.3, stipulates any other work on the Site at the time of Notice to Proceed known to the City of Durham and the Engineer.

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### ARTICLE 8 - OWNER'S RESPONSIBILITIES

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#### 8.01 ~~Communications to Contractor~~

~~A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.~~

#### 8.02 Replacement of Engineer

~~A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.~~

A. If Owner appoints a substitute Engineer, the substitute Engineer shall have the same status under the Contract Documents as the former Engineer.

#### 8.03 Furnish Data

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

#### 8.04 Pay When Due

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

#### 8.05 Lands and Easements; Reports and Tests

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

#### 8.06 Insurance

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

#### 8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

#### 8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

#### 8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

#### 8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

#### 8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in ~~the Supplementary Conditions~~ Article 8.

### ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

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#### 9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer. The action of the Engineer in performance of these duties shall not be construed to make the Engineer the agent for the Owner with respect to changes in the Cost or the Work or changes in the Contract Documents.

#### 9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

#### 9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in ~~the Supplementary Conditions~~ Article 9, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in ~~the Supplementary Conditions~~ Article 9.

B. The Resident Project Representative will serve as Engineer's liaison with Contractor, working principally through Contractor's Superintendent to assist such Superintendent in understanding the intent of the Contract Documents.

C. The Resident Project Representative shall have the following authority, to the extent that Engineer has such authority: to conduct on-site observations of the Work in progress to confirm that it is proceeding in accordance with the Contract Documents; to verify that

tests, equipment, and systems start-ups and maintenance instructions are conducted as required by the Contract Documents; and to disapprove and reject defective Work in accordance with the Contract Documents, including Article 13. No approval, inspection, failure to reject, or other action or failure to act by the Resident Project Representative shall reduce or waive Owner's right to non-defective Work that meets the requirements of the Contract Documents.

D. Except upon written instructions of Engineer and Owner, the Resident Project Representative shall not:

1. authorize any deviation from the Contract Documents or approve any substitute materials or equipment;

2. exceed limitations of Engineer's authority as set forth in the Contract Documents;

3. undertake any of the responsibilities of Contractor, Subcontractors, or Contractor's Superintendent, or expedite the Work;

4. advise on or issue directions relative to any aspect of the means, methods, sequences, techniques, or procedures of construction unless such is specifically called for in the Contract; or

5. advise on or issue directions as to safety precautions and programs in connection with the Work.

E. Paragraph 9.03.D shall not be construed to expand the Resident Project Representative's authority.

#### 9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

#### 9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the

Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

#### 9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

#### 9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

#### 9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

#### 9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

## ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

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### 10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

C. The Owner reserves the right to add to the original scope of Unit Price Work of the Contract upon the same terms and at the same unit prices included in the Agreement for all unit item additions, provided that such additions shall not result in an increase of more than fifty percent (50%) of the original Contract Price. The Contractor may be entitled to an extension in the Contract Times with the addition of Unit Price Work.

D. The Contractor shall perform emergency Work as required by the City of Durham. In such instances, the Engineer or Resident Project Representative shall give written notice to the Contractor for each instance of emergency Work. The Contractor shall perform all emergency Work within seventy-two (72) hours of the written notice. The City may perform (or engage another contractor to perform) emergency Work, at the Contractor's expense, if the Contractor fails to perform emergency Work within the time limit. If the City performs (or engages another contractor to perform) the following conditions apply:

1. if emergency Work is not a Unit Price Work item, the City shall charge all costs and expenses of the emergency Work, plus the City's then-current overhead charge to the Contractor and deduct those amounts from any money due to Contractor on the then-current or then-future Applications for Payment; and

2. if the emergency Work is a Unit Price Work Item, the City will charge all applicable emergency Work unit costs, plus an administrative and overhead charge of one hundred dollars (\$100.00) per instance to the Contractor and deduct those amounts from any money due to Contractor on the then-current or then-future Applications for Payment.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in the Contract Documents, including Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer or Owner allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer or Owner allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,

2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor:

1. invokes the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial, or

2. if the dispute resolution procedures set forth in Article 16 are not invoked and the appealing party institutes a formal proceeding, within 30 days of such action or denial, in a forum of competent jurisdiction (allowed under the Contract) to exercise such rights or remedies as the appealing party may have with respect to the Engineer's decision, unless otherwise agreed in writing by Owner and Contractor. The City Manager has

authority to enter into a written agreement extending the time period during which either party may institute such a formal proceeding.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

G. Mitigation of Damages: Once a party recognizes that it has grounds for a Claim, dispute, or other matter that may be submitted to Engineer (whether or not it may also be submitted to the other party), it shall use its best efforts to furnish Engineer and the other party, as expeditiously as possible, with notice of the potential Claim, dispute, or other matter. The potential claimant shall cooperate with Engineer and the party against whom the potential Claim, dispute, or other matter may be made in an effort to mitigate damages, delay, and other adverse consequences arising out of the condition which is the cause of the potential claim, dispute, or other matter. This duty to mitigate continues after the notice of Claim, dispute, or other matter is actually delivered.

H. These requirements, including as to time, are of the essence of the Contract Documents. No course of conduct or dealings between the parties, no express or implied acceptance of alterations or additions to the Work, and no assertion that the Owner has been unjustly enriched by any alteration or addition to the Work shall be the basis for any Claim to an increase in the Contract Price. In addition, all of Paragraphs 9.08.C and 9.08.D shall apply to those claims.

#### 10.06 Change Orders

A. Unless the Contract Documents or the Change Order provides otherwise, agreement on any Change Order shall constitute a final settlement of all matters relating to the change in the Work which is the subject of the Change Order, including all direct and indirect costs associated with such change and any and all adjustments to the Contract Price and the construction schedule. If a Change Order increases the Contract Price, Contractor shall include the Work covered by such Change Orders in Applications for Payment.

### ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

#### 11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional

or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of overtime or of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

~~4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.~~

5. Supplemental costs including the following:

~~a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's~~

~~employees incurred in discharge of duties connected with the Work.~~

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. These rates shall include all fuel, lubricants, insurance, etc. Equipment rental charges shall not exceed the prorated monthly rental rates listed in the edition of the 'Compilation of Rental Rates for Construction Equipment', as published by the Associated Equipment Distributors, which is current when the equipment rental begins. Charges per hour shall be determined by dividing the monthly rates by 176. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

~~f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.~~

g. The cost of utilities, fuel, and sanitary facilities at the Site.

~~h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.~~

~~i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.~~

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.

C. *Contractor's Fee:* When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish

and maintain records thereof in accordance with generally accepted accounting and in accordance with Owner's and Engineer's instructions practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data. The Owner and Engineer may specify additional or different requirements in accordance with the preceding sentence, but unless they so specify, the following is required in order to support a determination of cost of Work pursuant to Paragraph 11.01:

1. For costs under Paragraph 11.01.A.1, for each person who worked on the additional Work: a statement showing his or her job title, hourly rate paid or other method of compensation, other amounts described under Paragraph 11.01.A.1 that were paid, and the net change in the number of hours worked attributable to the change in the Work.

2. For costs under Paragraph 11.01.A.2, dated receipts from the Subcontractors and/or Sub-subcontractors. The receipts must acknowledge the Contractor's payment, identify the materials, supplies, equipment and show the name of the Owner's Project.

3. For costs under Paragraph 11.01.A.5.c, dated receipts from the rental the Subcontractors and/or Sub-subcontractors. The receipts must acknowledge the Contractor's payment, identify the machinery and equipment, and show the name of the Owner's Project, the rental rate, and the number of hours, days, miles, or other basis of the charge. If the Contractor supplies the machinery or equipment, the statement must show the rental rate and the number of hours, days, miles, or other basis of the charge, and the rental rate must not exceed the market rental rate.

4. For costs under Paragraph 11.01.A.5.i, written proof of a net change in the amount paid by the Contractor attributable to the change in the Work. For bonds, the proof must include the invoice or statement from the surety or its agent showing that it is attributable to the change in the Work.

#### 11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

##### B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation , overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

##### C. Contingency Allowance

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

#### 11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. If Owner changes any estimate of quantity before the Agreement is executed, it may substitute the new estimated quantity in those calculations. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead, ~~and~~ profit, and cost for coordinating the Work with the City of Durham for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner

is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

E. Each unit price shall be deemed to include an amount considered by the Contractor to be adequate to cover all construction surveying and existing utility location required to complete the Work as specified, or as directed by the Engineer, for each separately identified item.

F. This Paragraph 11.03.F applies except to the extent if any that the Bidding Documents specify otherwise.

1. Unit prices, if any, shall apply to Work done pursuant to Change Orders and to Work Change Directives.

2. In addition to Paragraph 11.03.F.1, it is agreed:

a. If unit price items are included in the Contract Documents for Work other than Work done pursuant to Change Orders and to Work Change Directives, it is also agreed that the Contract Price was calculated on the assumption that certain estimated quantities of unit price items will be used in the Work. Those estimated quantities are stated in the Contract Documents. The unit price multiplied by the quantity is referred to as the 'extension.'

b. If the actual extension of a unit price item is less than the estimated extension, the Contract Price shall be reduced accordingly.

c. The actual extension of each unit price item shall not exceed the estimated extension for that item unless the Contractor has received advance written approval from the Engineer to exceed the estimated quantity for that item. That approval may be limited in the Engineer's discretion. If that approval is given, the Contract Price shall be adjusted as follows:

1) If the actual quantity of a unit price item is more than the estimated quantity, the Contract Price shall be increased to reflect the difference between the actual and the estimated quantities.

2) If approval is not given, the Contractor shall not be obligated to use the quantity of that unit price item that exceeds the approved quantity, and a Change Order or Work Change Directive shall be executed to reflect the changes in the Work resulting from the actual quantity of the item that is used.

3) If the Contract Documents explicitly and clearly state that no further approval from the Engineer or the Owner is required for the Contractor to exceed the estimated quantity of specified unit price items, then it is agreed that the Contract Price shall be adjusted to reflect the actual quantities of those items without the necessity of further approval.

## ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

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### 12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be ~~+5 percent~~ ten percent (10%) and shall not be applied to payroll taxes, social security contributions, or unemployment taxes;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of ~~15 percent~~ ten percent (10%) of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 (excluding payroll taxes, social security contributions, and unemployment taxes) and that ~~any higher the next higher~~ tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

## 12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

## 12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal

weather conditions, or acts of God. Nothing in Article 12 or any other provision of the Contract Documents is intended to forbid or limit compensable damages for delays caused solely by the Owner or the Owner's agent, and any provision to the contrary shall be construed to comply with this Paragraph 12.03.A. For purposes of this Paragraph 12.03.A, 'Owner' or the 'Owner's agent' does not include prime contractors or subcontractors.

~~B. If Owner or Owner's agent, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.~~

C If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C. Except to the extent, if any, that it may otherwise be provided in the Contract Documents, Contractor's sole remedy for any of the following:

1. delay in the commencement, prosecution, or completion of the Work,

2. hindrance or obstruction in the performance of the Work,

3. loss of productivity, or

4. other similar delays and losses (said 1, 2, 3, and 4 being collectively referred to in this Paragraph 12.03 as 'Such Delays').

Whether or not Such Delays are foreseeable, shall be an extension of the Contract Times if permitted and granted under this Article 12. To the extent allowed by the Contract Documents, Contractor shall be entitled to no other compensation or recovery of any damages in connection with any Such Delays, including consequential damages, lost opportunity costs, impact damages, or other similar remuneration. To the extent of conflict, the Contract or Agreement as signed by the Owner and Contractor shall control this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

F. Adjustment of Contract Times for weather related delays shall be as stipulated in the Agreement, Paragraph 1.4.D.

ARTICLE 13 - TESTS AND INSPECTIONS;  
CORRECTION, REMOVAL OR ACCEPTANCE OF  
DEFECTIVE WORK

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13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

~~A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.~~

A. Contractor shall employ and pay for all inspections and testing services required by the Contract Documents, except those for which the Contract Documents specifically call for Owner to employ and pay.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform ~~all the~~ inspections, tests, or approvals required by the Contract Documents, ~~except:~~

~~1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;~~

~~2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and~~

~~3. as otherwise specifically provided in the Contract Documents.~~

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

G. The City of Durham may engage an independent consultant for the direct inspection and administration of any or all of the Work to be performed in the Contract. This consultant shall act on the behalf of the City of Durham.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, or contrary to the Contract Documents, or before required inspections, tests, or approvals, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request,

shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Contractor shall not be entitled to any increase in Contract Times because of the time involved in such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05. However, if such Work had been prematurely covered, the preceding sentence shall not apply, and Contractor shall have no such rights.

### 13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, or persistently fails to carry out the Work in accordance with the Contract Documents, or if the Work interferes with the operation of the existing facility, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

### 13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but

not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others). Engineer and Owner may reject any defective Work, even if inspected and paid for, except to the extent accepted under Paragraph 13.08. A failure to disapprove or reject such defective Work does not constitute an acceptance.

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

### 13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly (but in any event, commencing within thirty (30) days after receipt of said instructions and proceeding promptly to completion), without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly (but in any event, commencing within 30 days after receipt of said instructions and proceeding promptly to completion) comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications. If prior to the date of Substantial Completion, Contractor or any entity for which Contractor is responsible uses or damages any portion of the Work, then Contractor, at no expense to Owner, shall cause such portion, system, device, or item to be restored (whether by replacement, repair, or otherwise) to the condition the item was required to be in, if such use or damage had not occurred. Nothing herein shall reduce the duty of Contractor with respect to such item in order to obtain a final payment.

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

F. Establishment of the one (1) year periods in this Paragraph 13.07 relates only to the specific obligation of Contractor to take certain actions relating to defective Work and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced.

#### 13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs

after such recommendation, an appropriate amount will be paid by Contractor to Owner.

B. An acceptance of defective Work is not effective as an acceptance unless it specifically describes the condition that is defective and contains substantially the following statement: 'The Owner accepts [such condition] despite its being defective.'

#### 13.09 *Owner May Correct Defective Work*

A. If Contractor fails ~~within a reasonable time~~ after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work some or all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow and provide Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site and storage locations referred to in the preceding sentence to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by

Owner of Owner's rights and remedies under this Paragraph 13.09.

## ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

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### 14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

### 14.02 *Progress Payments*

#### A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein including the transportation to the Work Site, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

4. Contractor shall submit the Subcontractor Monthly Record of Payment Report form with each Application for Payment, except for the initial and final Application for Payment. The Contractor shall submit the Final Subcontracting Report form with the final Application for Payment. Failure to submit these forms, which are provided in Appendix C, may be a basis for denying payment.

### B. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

a. ~~the Work is defective~~ any of the Work, whether or not paid for, is defective, except to the extent accepted under Paragraph 13.08, or completed Work has been damaged, requiring correction or replacement;

b. the Contract Price has been reduced by Change Orders;

c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09;~~or~~

d. Engineer has actual knowledge of or reasonable grounds to believe in the occurrence of any of the events enumerated in Paragraph 15.02.A.

e. there are reasonable grounds to believe that the Work cannot be completed for the unpaid balance of the Contract Price; or

f. Contractor is anticipated to owe damages or other amounts to Owner.

#### C. Payment Becomes Due

1. ~~Ten~~ Thirty (30) days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

#### D. Reduction in Payment

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;

b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;

c. there are other items entitling Owner to a set-off, including any cost or expense related to defective Work, against the amount recommended;~~or~~

d. Owner has actual knowledge of or reasonable grounds to believe in the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

e. any of the property and casualty insurance requirements enumerated in Article 5 are not complied with at their renewal dates.

f. there are reasonable grounds to believe that the Work cannot be completed for the unpaid balance of the Contract Price; or

g. Contractor is anticipated to owe damages or other amounts to Owner.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld, as determined in a competent jurisdiction having binding authority, shall be treated as an amount due as determined by Paragraph 14.02.C.1.

4. Failure of Owner to refuse to make payment does not waive Owner's rights under the Contract Documents.

#### 14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the

Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

B. The Application for Payment shall be accompanied by such data, satisfactory to Owner, as will establish Owner's title to the material and equipment and protect his interest therein, including applicable insurance. Each subsequent Application for Payment shall include an Affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied to discharge in full all of Contractor's obligations reflected in prior Applications for Payment.

#### 14.04 Substantial Completion

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected), including the time within which each of those items shall be completed or corrected, reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to

Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

#### 14.05 Partial Utilization

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

~~4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.~~

#### 14.06 Final Inspection

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in

writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 14.07 Final Payment

##### A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

- a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;
- b. consent of the surety, if any, to final payment;
- c. a list of all Claims against Owner that Contractor believes are unsettled; and
- d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

##### B. Engineer's Review of Application and Acceptance

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work

has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

2. Without extra charge to Contractor, Engineer will make only two (2) such inspections to determine final completion. If Engineer is not able to make the representations and findings required to recommend final payment, successive inspections requested by Contractor shall be charged to Contractor.

##### C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

#### 14.08 Final Completion Delayed

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

#### 14.09 Waiver of Claims

A. The making and acceptance of final payment will constitute:

1. ~~a waiver of all Claims by Owner against Contractor, except~~ no waiver of any claims, or the right to make any claims, by Owner against Contractor, including

Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

#### 14.10 Prompt Payment to Subcontractors

A. Within seven (7) days of receipt by Contractor of each payment from the City of Durham under this Contract, the Contractor shall pay all Subcontractors (including Suppliers and others) based on work completed or service provided under the subcontract. Should any payment to the Subcontractor be delayed by more than seven (7) days after receipt of payment by the Contractor from the City under this Contract, the Contractor shall pay the Subcontractor interest, beginning on the eighth (8<sup>th</sup>) day, at the rate of one percent (1%) per month or fraction thereof on such unpaid balance as may be due. By appropriate litigation, Subcontractors shall have the right to enforce this Paragraph 14.10.A directly against the Contractor, but not against the City of Durham. If the Engineer determines that it is appropriate to enforce this Paragraph 14.10.A, the City of Durham may withhold the sums estimated by the Engineer to be sufficient to pay this interest from progress or final payments to the Contractor.

B. Nothing in this Paragraph 14.10 shall prevent the Contractor at the time of invoicing, application, and certification to the City from withholding invoicing, application, and certification to the City for payment to the Subcontractor for unsatisfactory job progress; defective goods, services, or construction not remedied; disputed work; third-party claims filed or reasonable evidence that such a claim will be filed; failure of the Subcontractor to make timely payments for labor, equipment, and materials; damage to the Contractor or another Subcontractor; reasonable evidence that the subcontract cannot be completed for the unpaid balance of the subcontract sum; or a reasonable amount for retainage consistent with the Agreement.

C. The Engineer may require, as a prerequisite to making progress or final payments, that the Contractor provide statements from any Subcontractors designated by the Engineer regarding the status of their accounts with the Contractor. The statements shall be in such format as the Engineer reasonably requires, including notarization if so specified.

## ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

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### 15.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which, or the event after which, Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05. No adjustment shall be made to the extent that performance is, was, or would have been suspended, delayed, or interrupted directly or indirectly by Contractor or any Entity for which Contractor is responsible. The Contract Price shall not be adjusted except to the extent that the total of such suspensions exceeds thirty (30) days and after excluding such thirty day period.

### 15.02 Owner May Terminate for Cause

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

### 15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, ~~including fair and reasonable sums for overhead and profit on such Work~~ as determined in Article 11;

2. expenses sustained prior to the effective date of termination in ~~performing services and furnishing labor, ordering materials, or equipment~~ as required by the Contract Documents in connection with uncompleted Work, ~~plus fair and reasonable sums for overhead and profit on such expenses;~~ the Owner shall have the options detailed in Paragraphs 15.03.A.2.a through 15.03.A.2.d;

a. Upon seven (7) days of receipt of the notice of termination for convenience Contractor shall provide evidence of materials ordered as described in Paragraph 15.03.A.2 including an itemized list, cost, order and delivery dates, and all terms or conditions (including ordering, canceling, or restocking charges).

b. Owner may direct the Contractor to cancel any one or more orders, in which case the Owner shall be liable for cancellation and restocking charges and other charges properly attributable to the cancellation; or

c. Owner may direct the Contractor to keep any one or more orders in effect and/or to assign any one or more orders to the Owner, in which case the Owner shall be responsible for bearing the costs of the order.

d. Within ten (10) days of the Owner's receiving the evidence described in Paragraph 15.03.A.2.a, the Owner shall give the Contractor notice of which options it exercises under Paragraphs 15.03.A.2.b or 15.03.A.2.c.

~~3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and~~

3. The Owner shall pay the Contractor a termination fee of one hundred dollars (\$100.00) in addition to other amounts due pursuant to this Paragraph 15.03.

~~4. reasonable expenses directly attributable to termination.~~

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

### 15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally

determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

#### 15.05 Protection and Preservation of the Work

A. Upon suspension (Paragraph 15.01), termination (Paragraphs 15.02, 15.03, and 15.04), or stopping Work (Paragraph 15.04):

1. Contractor shall take actions necessary for the protection and preservation of the Work, and Site, including those actions required by the Contract, except to the extent otherwise directed by the Engineer; and

2. Contractor shall erect and leave in place barricades, lights, and other safety devices as are appropriate for the protection of the public, including those devices required by the Contract, except to the extent otherwise directed by the Engineer.

B. If the Contractor performs work pursuant to directions given by the Engineer as described in Paragraph 15.05.A for the protection and preservation of the Work or of the public, Owner shall pay the Contractor for such protection and preservation work to the extent that it is greater than the Contractor would have done during or at the end of a work day had the contract not been suspended or terminated or the Work stopped.

### ARTICLE 16 - DISPUTE RESOLUTION

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#### 16.01 *Methods and Procedures*

~~A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for~~

~~mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.~~

A. Any party allowed to use the dispute resolution process adopted by the State Building Commission pursuant to G. S. 143-135.26(11) and G. S. 143-128(F1) may participate in mediation pursuant to the dispute resolution process as a precondition to initiating litigation concerning the dispute. The amount of \$15,000 or more must be at issue before a party may require other parties to participate in the dispute resolution process. The costs of the dispute resolution process shall be divided between the parties to the dispute with at least one-third of the cost to be paid by the Owner, if the Owner is a party to the dispute.

~~B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.~~

~~C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:~~

~~1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or~~

~~2. agrees with the other party to submit the Claim to another dispute resolution process, or~~

~~3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.~~

### ARTICLE 17 - MISCELLANEOUS

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#### 17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered by facsimile or in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

B. If a party is notified of a replacement person for purpose of getting notice, then notices afterwards shall be directed to the replacement person. Written notices shall be deemed to have been duly served, made, and received, and receipt thereof completed, if:

1. delivered in person to the individual or to that individual's receptionist; or

2. mailed by registered or certified mail to the last business address known to the party giving notice; or

3. faxed to the last fax number known to the party giving notice, provided that the fax transmission must be completed.

C. Written notices to the Owner must be directed to the Owner's representative, provided that if no individual is designated as the Owner's representative, then written notices must be directed to the City Manager. As used in this Paragraph 17.01, the word 'notice' includes 'request.'

D. The notice will be deemed served, made, and received, and receipt thereof completed, on the earlier of:

1. the date delivered in person; or

2. three (3) days after placing in the custody of the U. S. Postal Service; or

3. the date the fax transmission was completed.

E. Address of Surety: Unless the surety provides a different address as provided in Paragraph 17.01, notice to a surety may be sent to the address shown on the performance bond; if no address for the surety is shown on the performance bond, the surety's address provided by the N. C. Department of Insurance shall suffice; and if the Department of Insurance lacks an address, the last-known address of the attorney-in-fact who signed the performance bond shall suffice.

#### 17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation. As used in the preceding sentence, a 'legal holiday by the law of the applicable jurisdiction' is a holiday observed by city government of the City of Durham. See City Code Section 42-16 for information on such holidays.

#### 17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available

hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

#### 17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

#### 17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

#### 17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

#### 17.07 *Effect on Other Rights*

A. The Contract Documents shall not be construed to create a cause of action against Owner and in favor of any person, firm, or corporation, other than Contractor. The Contract Documents shall not be construed to create a cause of action against Engineer and in favor of any person, firm, or corporation, other than Owner. The Contract Documents are not intended to create a defense, except by Contractor, to any cause of action that may be brought by Owner. The recitation of duties, or limitations of duties, in the Contract Documents (e.g., Paragraph 9.09) of Engineer or Engineer's consultants, representatives, and assistants, shall not be construed to reduce Owner's rights against Engineer or to reduce Engineer's duties to Owner. No action or failure to act by Owner shall constitute a waiver of a right except to the extent specifically agreed in writing. If Owner waives a right, that waiver shall not imply other waivers of that right. If liquidated damages are assessable against the Contractor, Owner may, in its discretion, waive the imposition of some or all of the liquidated damages against the Contractor. That waiver shall be valid only if done by a writing signed by the City Manager or an Assistant City Manager, and the waiver must refer specifically to 'liquidated damages.' That waiver shall not constitute an extension of the Contract Time.

B. The Agreement represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations and representations. Except as specifically otherwise provided, the Agreement is not intended to benefit, or to create a cause of action in favor of, any person, firm, or corporation, other than Owner and Contractor. Oral statements by anyone, including Owner's employees, agents, and Engineer, whether made before or after the execution of the Agreement, shall not be binding on Owner and shall not reduce Owner's rights under the Contract Documents.

#### 17.08 Place of Project

A. Choice of Law and Forum: The place of the Project is North Carolina. This Contract shall be deemed made in Durham, North Carolina. This Contract shall be governed by and construed in accordance with the laws of North Carolina. The exclusive forum and venue for all actions arising out of this Contract shall be the North Carolina General Court of Justice, in Durham County. Such actions shall neither be commenced in nor removed to federal court. This Paragraph shall not apply to subsequent actions to enforce a judgment entered in actions heard pursuant to this Paragraph.

#### 17.09 Equal Employment Opportunity (EEO)

A. During the performance of this Contract the Contractor agrees as follows:

1. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. Contractor shall take affirmative action to insure that applicants are employed and that employees are treated equally during employment, without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. Such action shall include but not be limited to the following: employment, upgrading, demotion, transfer, recruitment or advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to employees and applicants

for employment, notices setting forth these EEO provisions;

2. Contractor shall in all solicitations or advertisement for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or handicap;

3. Contractor shall send a copy of the EEO provisions to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding;

4. in the event of Contractor's noncompliance with these EEO provisions, the City of Durham may cancel, terminate, or suspend this contract, in whole or in part, and the City may declare the Contractor ineligible for further City contracts; and

5. unless exempted by the City Council of the City of Durham, Contractor shall include these EEO provisions in every purchase order for goods to be used in performing this Contract and in every subcontract related to this Contract so that these EEO provisions will be binding upon such Subcontractors and Suppliers.

B. City Policy: The City of Durham opposes discrimination on the basis of race and sex and urges all of its contractors to provide a fair opportunity for minorities and women to participate in their work force and as subcontractors and suppliers under City contracts.

#### 17.10 Americans with Disabilities Act (ADA)

A. Notice Under the Americans with Disabilities Act - A person with a disability may receive an auxiliary aid or service to effectively participate in city government activities by contacting the ADA Coordinator, voice (919) 560-4197, fax (919) 560-4196, TTY (919) 560-1200, or [ADA@durhamnc.gov](mailto:ADA@durhamnc.gov), as soon as possible but no later than forty-eight (48) hours before the event or deadline date.

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**SECTION 312000  
EARTH MOVING**

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes earth moving (any necessary downspout extension trenching and filling, grading, excavating, embankments, and sedimentation and erosion control) requirements for rain gardens, channels, and swales.
- B. The Contractor shall use whatever equipment is necessary to ensure that earth moving shall be achieved without damage to any private property on or near the installation site. The Contractor will be solely responsible for the repair and restoration required to return any damaged property to its original condition.
- C. Section includes all efforts necessary to clean site (e.g., remove fill from lawn and landscaped areas, repair damaged or exposed areas of lawn and landscaped areas, etc.) to its original state prior to construction activities.
- D. Prior to any construction activities, including earth moving, at a given project location, The Contractor shall contact the “North Carolina 811” [www.nc811.org/](http://www.nc811.org/) or 1-800-632-4949 for guidance and regulations concerning excavation in North Carolina.
- E. The Contractor shall sign a statement saying that each rain garden has been successfully installed, as work progresses. The Contractor shall, if requested by the Engineer, provide sufficient staff and equipment to check any or all sites to ensure that final elevations and areas are correct. All sites will be reviewed by the Engineer in a timely manner, within a week of being constructed. If the rain gardens are not constructed to the elevations and dimensions indicated on the plans, then at the discretion of the Engineer, the Contractor shall be required to correct identified dimensions of the constructed site that are not compliant with the plans and specifications.. All site corrections for the project shall be completed by the Contractor within 200 days of the Notice to Proceed, or the Contractor shall pay the City of Durham \$400/day until all the site corrections have been completed.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of the Contract, apply to this Section.
- B. Section 334727.12 – Triple Shredded Hardwood Mulch
- C. Section 334727.13 – Rain Garden Media

1.3 UNIT PRICE WORK – MEASURE AND PAYMENT

- A. Definitions
  - 1. Basis of Measurement: Cubic Yards (CY)

Basis of Payment: Includes the work described in this specification section and associated project drawings. Includes all materials, labor, equipment, tools, etc., required to complete the work.

1.4 SUBMITTALS

**SECTION 312000  
EARTH MOVING**

- A. Action Submittals: None
- B. Informational Submittals: None

**PART 2 – PRODUCTS**

**2.1 MATERIALS**

- A. **Fill and Backfill Material:**  
Fills and backfills that are not otherwise specified herein shall be constructed with any suitable excavated material of clays, silts, sands, native stone, or combinations thereof which contain 100 percent particles smaller than two (2) inches. This material shall be placed in accordance with the requirements hereinafter specified.
- B. **Unsuitable Materials:**  
All material removed in excavations required by the plans containing perishable matter such as roots, sod, grass, decayed vegetable matter, debris, rocks larger than two (2) inches, frozen material or materials having unsatisfactory compaction characteristics will be classified as unsuitable for reuse in the grading work.
- C. **Rain Garden Media:**  
Refer to Section 334727.13

**2.2 FINISH GRADES**

- A. Finish grades shall be held to the following tolerances:
  - 1. Rain Garden Surface  $\pm$  0.05 ft.
  - 2. Top of Berms  $\pm$  0.05 ft.
  - 3. Swales  $\pm$  0.05 ft.

**PART 3 – EXECUTION**

**3.1 PREPARATION**

- A. Inspect and check site of excavation for correct layout and/or alignment.
- B. Before commencing work, locate all baselines required for control of the work and establish grade staking as needed for control of excavation and embankment construction.
- C. Clear all sites to be occupied by permanent construction embankments of all logs, trees, roots, brush, tree trimmings, and other objectionable materials and debris.
- D. When construction operations are located within streets, make provisions at cross streets and walks for free passage of vehicles and pedestrians. Do not block streets or walks without prior approval by the Owner.
- E. Do not remove trees, turf, or landscaped areas outside of excavated or filled areas, unless their removal is authorized by the homeowner, City, and Engineer. Protect trees from permanent damage by construction operations.

**SECTION 312000  
EARTH MOVING**

3.2 SOIL STORAGE

- A. Prior to beginning earth moving operations, a suitable location for storing excavated soil shall be identified. Soil may be placed immediately into a transport vehicle or onto a surface which will not allow soils to contact lawns or landscaped areas.
  
- B. Soil stockpiles shall be removed daily to avoid soil discharge to surrounding areas. Further, any surface used for soil storage shall be removed from lawn areas within 1 day to avoid grass die-off.

3.3 DEWATERING

- A. Maintain the excavations and site free from water throughout the course of the work.
  - 1. Provide and maintain dewatering equipment to remove and dispose of all surface and groundwater entering the excavation. Keep each excavation dry during subgrade preparation and continually thereafter until the structure is completed.
  - 2. Divert or otherwise prevent surface water from entering excavated areas or trenches.

3.4 SOD REMOVAL AND STORAGE

- A. Prior to excavation, the existing sod in the area of excavation shall be removed along with sufficient root depth of soil.
  
- B. The sod shall be stored away from direct sunlight and watered as needed to maintain grass health.
  
- C. After the site excavation and fill is completed, the harvested sod can be installed on the rain garden berms and/or rain garden weir.
  
- D. If removed, existing sod is not of sufficient vigor to withstand potential flows in and around the rain garden, replacement sod from offsite shall be installed.

3.5 EXCAVATION

- A. Prior to beginning excavation operations, accomplish all site preparation in accordance with these specifications. Perform excavation of every description to the lines and grades indicated on the drawings.
  
- B. Complete excavation work to the grade elevations shown on the drawings within a tolerance consistent with 2.3.
  
- C. Once the excavation elevation has been reached, the bottom of the excavated area shall be scarified to encourage infiltration. This may be achieved by using excavator or backhoe teeth to scrape the surface down to a depth of 6 inches. Alternative methods are acceptable if approved by the Engineer and City.

**SECTION 312000  
EARTH MOVING**

3.6 BACKFILL, FILL, AND GRADING

- A. Place and grade acceptable soil material in layers (6" inch max) and tamp lightly without excessive compaction until required elevations are met. Use soil material free of rock or gravel larger than 2" in any dimension, debris, vegetable matter, waste, and frozen materials.
- B. Fill below-grade areas and voids resulting from excavation operations. Use satisfactory soil materials as defined in 2.1A. Backfill excavations as promptly as work permits.
- C. Prepare ground surface to receive fill by removing vegetation, debris, unsatisfactory soil materials and obstructions. Scarify as required so that fill material will bond with existing surface.
- D. For required berm areas, elevations shall be met as stated in construction drawings. Berms shall be covered in viable sod, if stored from onsite, or sown in fescue, as the case may be.
- E. Maintenance: Repair and re-establish grades in settled, eroded, rutted, or otherwise damaged areas.
- F. Disposal: Remove excess excavated material, trash, debris, and waste material from the site promptly.

3.7 RAIN GARDEN INLETS

- A. Rain gardens may require one, two, three, or four inlets, or in one case, no inlet.

# of Inlets	0	1	2	3	4
# of Rain Gardens	1	23	20	4	3

3.8 RAIN GARDEN WEIR

- A. After grading of rain garden weir to elevations shown in construction plans, berms shall be covered in viable sod, if stored from onsite, or sown with fescue, as the case may be. Sod shall be staked in place using the smallest reasonable wood stakes and immediately able to withstand flowing water, approved by the Engineer.

3.9 RAIN GARDEN MEDIA AND TRIPLE SHREDDED HARDWOOD MULCH

- A. No rain garden media or triple shredded hardwood mulch shall be placed until all earth moving, excavation, and grading have been completed and exposed soils have been stabilized.

3.10 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS

- A. Protect trees, plants, and lawns or other improvements from injury or damage resulting from construction operations.

**SECTION 312000  
EARTH MOVING**

- B. Replace any property of the homeowner including, but not limited to, signs, trees, plants, and lawns or other improvements removed, injured, or damaged by Contractor's operations or restore to former state or better, at no additional cost to Owner.
- C. Protect from damage any underground pipes, utilities or structures encountered during construction. Restore any damaged underground obstructions to their original condition at no additional expense to the Owner unless evidence of other arrangements satisfactory to all parties are presented to the Owner.

3.11 SITE CLEANUP

- A. After earth moving activities are complete, any excess soil, fill material, or other construction debris shall be removed from the site. The site shall be left in the manner in which it was found. Refer to 017400.

**SECTION 329219**  
**PLANTING FESCUE OR RESODDING THE BERM AREA**

**PART 1 GENERAL**

**1.1. SUMMARY**

- A. Excavating and reusing the sod present on the rain garden construction site is preferred if possible. Planting fescue will be necessary where sod is not in good enough condition to salvage and/or reuse from where excavation takes place to build the rain garden facility.
- B. Under this specification, the Contractor shall provide all labor, materials, transportation, equipment, and incidentals required for establishing grass on the rain garden berm including furnishing, planting, mulching and watering fescue as shown on the construction plans and/or as directed by the Engineer or establishing sod salvaged from the site.
- C. Prior to start of work, the Contractor shall submit the type and specifications for the fescue to be planted to the Engineer for review. No grass shall be planted until the grass type is approved.
- D. Grass or sod shall be established before planting the rain garden plants specified in the plans.

**1.2. RELATED SPECIFICATIONS**

- A. Section 312000 - Earth Moving
- B. Section 334727.12 - Triple Shredded Hardwood Mulch
- C. Section 334727.13 - Rain Garden Media

**1.3. UNIT PRICE WORK – MEASURE AND PAYMENT**

- A. Definitions
  - 1. Basis of Measurement: Shall be based on the total number of rain garden facilities (per each) installed.
  - 2. Basis of Payment: The contract price bid for planting grass shall cover the cost of all labor, materials, transportation, equipment, insurance, and incidentals required to furnish and plant grass in full compliance with the requirements of the design plans and specifications.

**1.4. SUBMITTALS**

- A. Product Data: Submit manufacturer's product data and installation instructions. Include required substrate preparation, list of materials, and application rate.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

- A. Turf Type Fescue seed blend:

**SECTION 329219**  
**PLANTING FESCUE OR RESODDING THE BERM AREA**

1. Inert Material: Less than 2%.
  2. Other Crop Seed: Less than 0.5%.
  3. Weed Seed: Less than 0.5%.
- B. Lime-Agricultural or Pelletized Lime applied at specified rate according to soil analysis or 2,000 lbs per acre (5 lbs/100 square feet) if no soil analysis is performed.
- C. Fertilizer-the Contractor shall use slow-release organic fertilizer tablets in lieu of petroleum-based fertilizers. Suitable products are commercially available and are marketed and certified as 'organic' or 'natural' fertilizers. Product nutrient content shall be identified in the standard form of Nitrogen (N), Phosphorous (P) and Potassium (K) ratios. Fertilizer nutrient content shall be 12-8-8 or higher. The application rate shall follow manufacturer's recommendations for planting fescue. Any proposed substitution to this nutrient content must be approved by the Engineer
- D. Straw Mulch-Dry, unweathered, unchopped straw, without any weeds.

**PART 3 EXECUTION**

**3.1 GENERAL**

- A. Deliver grass seed, lime and fertilizer materials and products in factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from weather damage, excessive temperatures, and construction operations.

**3.2 PLANTING**

- A. Resodding
1. Install sod within 24 hours of harvest. Store sod in shade after harvest and before installation.
  2. Rake soil surface to break crust before laying sod, and wet soil thoroughly before sod is placed.
  3. Install strips of sod with their longest dimension perpendicular to the slope, and offset edges of the sod in a brick-like pattern. Do not stretch or overlap. All sod strip edges shall fit tightly against each other, with minimal gaps.
  4. Roll sod lightly after installation to ensure firm soil contact.
  5. Irrigate sod until soil 4 inches below the roots is saturated.
- B. Planting Fescue
1. Prepare the soil before planting by ensuring that it is not compacted. Loosen soil to a depth of 4 inches if compaction is evident.
  2. Lime shall be topically applied at a rate of 5 lbs per 100 square feet.
  3. Fertilizer shall be spread evenly over the seeded areas at a rate of 8lbs/1000 square feet.
  4. Apply fescue seed at a rate of 8lbs/1000 square feet or approximately 1lb/100 square

**SECTION 329219**  
**PLANTING FESCUE OR RESODDING THE BERM AREA**

feet. Seed may need to be applied at a half rate in alternating directions to ensure an even coverage of seed. Seed and other amendments can be settled into the soil by running a light cultipacker (or using a similar light packing procedure) over the application area. The seed shall not be settled into the soil any deeper than 1/8".

5. Apply straw mulch to the seeded area so that at least 90 percent of the soil area is covered.
6. Irrigate the fescue planting area with water to a depth of 4 inches after application of straw mulch.

3.3 MAINTENANCE

- A. During planting, all areas shall be kept neat, clean and free of all trash and debris, and all reasonable precautions shall be taken to avoid damage to existing plants, turf, structures, and private property.
- B. Final cleanup shall be the responsibility of the Contractor and consist of removing all trash and materials incidental to the project, including off-site disposal.
- C. It will be the Contractor's responsibility to supply water if there is none available on the site. Any costs associated with supplying water shall be the responsibility of the Contractor.

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**SECTION 329323.33**  
**RAIN GARDEN PLANTS**

PART 1 GENERAL

1.1. SUMMARY

- A. Under this specification, the Contractor shall provide all labor, materials, transportation, equipment, and incidentals required for furnishing, correctly locating, planting and watering herbaceous perennial species and shrubs as specified in the appropriate planting schedule for the rain garden facilities as shown on the Contract Drawings and/or as directed by the Engineer.
- B. Prior to start of work, the Contractor shall submit a proposed planting schedule, including source of plant material, to the Engineer for review. No woody or herbaceous perennial species may be substituted without prior approval of the Engineer and by the City, at their discretion. No work shall be performed until this schedule is approved by the Engineer and the City, at their discretion.
- C. The Engineer may request the Contractor to stake the location of individual plants within the approved Planting Zones.

1.2. RELATED SPECIFICATIONS

- A. Section 334727.12 - Triple Shredded Hardwood Mulch
- B. Section 334727.13 - Rain Garden Media

1.3. UNIT PRICE WORK – MEASURE AND PAYMENT

A. Definitions

- 1. Basis of Measurement: Shall be based on the total number of shrubs (per each) installed and the number of plants installed (per each).
- 2. Basis of Payment: The contract price bid for shrubs and herbaceous perennial plants shall cover the cost of all labor, materials, transportation, equipment, insurance, and incidentals required to furnish and install the shrubs and herbaceous perennial plants in full compliance with the requirements of the design plans and specifications, and to perform maintenance and warranty-related activities.

1.4. REFERENCES

- A. Powell, M.A. 1997. *Planting Techniques for Trees and Shrubs*, North Carolina State University Cooperative Extension Service Leaflet No. 601.
- B. Evans, E. 2000. *Planting Trees and Shrubs*, North Carolina State University Horticultural Information Leaflet 8601.
- C. Bardon, R.E., Neill, K., Hardin, R., and Chester-Davis, L., 2004. *Extension's Successful Gardener, Tree Planting Guide*, North Carolina State University Cooperative Extension Service

**SECTION 329323.33  
RAIN GARDEN PLANTS**

1.5. SUBMITTALS

- A. Prior to the procurement of the shrubs and herbaceous perennial plants required by the project, the availability and sources of all plant material are required for review and approval by the Engineer and the City of Durham. Any substitutions of plant species for any reason must be approved by the Engineer and the City of Durham.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Shrubs shall be in 2 gallon containers. Herbaceous perennial plant shall be in one gallon containers or a minimum 4”x4”x4” container.
- B. The following planting schedules, for each of the proposed rain garden location types, shall be followed:

<b>Full Sun Location</b>			
Shrubs		Herbaceous Perennial Species	
Common name	Genus/species	Common name	Genus/species
Buttonbush	<i>Cephalanthus occidentalis</i>	Cardinal flower	<i>Lobelia cardinalis</i>
Virginia sweetspire	<i>Itea virginica</i>	New England aster	<i>Aster novae-angliae</i>
Possumhaw	<i>Viburnum nudum</i>	Blue flag iris	<i>Iris virginicus</i>
Highbush blueberry	<i>Vaccinium corymbosum</i>	Little Bluestem	<i>Schizachyrium scoparium</i>
		Bluestar	<i>Amsonia tabernaemontana</i>

<b>Partial Shade Location</b>			
Shrubs		Herbaceous Perennial Species	
Common name	Genus/species	Common name	Genus/species
Elderberry	<i>Sambucus canadensis</i>	Cardinal flower	<i>Lobelia cardinalis</i>
Chokeberry	<i>Photinia pyrifolia</i>	New England aster	<i>Aster novae-angliae</i>
Winterberry	<i>Ilex verticillata</i>	Virginia bluebells	<i>Mertensia virginica</i>
Virginia sweetspire	<i>Itea virginica</i>	Culver’s root	<i>Veronicastrum virginicum</i>
Buttonbush	<i>Cephalanthus occidentalis</i>	Little Bluestem	<i>Schizachyrium scoparium</i>
		Butterflyweed	<i>Asclepias tuberosa</i>

PART 3 EXECUTION

3.1 GENERAL

- A. All plant material shall conform to the current issue of the American Standard for Nursery Stock published by the American Association of Nurserymen.

**SECTION 329323.33**  
**RAIN GARDEN PLANTS**

- B. Plant materials must be selected from certified nurseries that have been inspected by state and/or federal agencies. Nursery inspection certificates shall be furnished to the Engineer upon request.
- C. The nursery supply source shall be from the Piedmont physiographic province, and not more than 200 miles from the site.
- D. The Contractor will arrange for the Engineer, and the City at their discretion, to inspect the shrub and perennial herbaceous plant stock before installation.
- E. The Engineer and the City, at their discretion, shall reserve the right to reject plant stock at the site that is dead, dying or appears unhealthy. In addition, all plant material that has been improperly maintained, dug, transported or handled in such a way as to impair its appearance or health will be rejected.
- F. Plant material collected from the wild is prohibited.
- G. Water used in the establishment or caring of plants and seed shall be free from any substance that is injurious to plant life.
- H. The Contractor shall use slow-release organic fertilizer tablets in lieu of petroleum-based fertilizers. Suitable products are commercially available and are marketed and certified as 'organic' or 'natural' fertilizers. Organic tablet materials may include such items as sea grasses/kelp, rock powder, bone meal, whey, bean meal, blood meal, composted manure, etc. Product nutrient content shall be identified in the standard form of Nitrogen (N), Phosphorous (P) and Potassium (K) ratios. Fertilizer nutrient content shall be 12-8-8 or higher. The application rate shall follow manufacturer's recommendations for planting trees and shrubs, according to the size of the tree. Any proposed substitution to this nutrient content must be approved by the Engineer.

3.2 PLANTING

A. Containerized Shrubs and Herbaceous Perennial Plants

- 1. All areas disturbed by construction shall be planted in accordance with the appropriate planting schedule, based on sun exposure (Full Sun or Partial Shade).
- 2. The Contractor shall refer to the construction plans, plant schedules, and details on the plans for specific spacing requirements.
- 3. In the plant schedules and details, the Contractor shall use the overall spacing figures to determine the spacing between each species of vegetation.
- 4. All planting holes shall be dug deep to properly align root collar with the soil surface.
- 5. Remove all non-organic debris from the hole and tamp loose soil in the bottom of the hole by hand.
- 6. When planting, spread roots in the hole, add fertilizer tablet(s) and gradually backfill with soil. Firm the soil, being careful to avoid breaking roots, fill hole with water (weather permitting), and backfill with additional soil as necessary. Hand tamp as hole is being backfilled to completely fill all voids and air pockets. Do not over compact soil. Make sure plant remains straight during backfilling/tamping procedure.
- 7. Each plant shall be watered thoroughly after installation.

3.3 MAINTENANCE

- A. During planting, all areas shall be kept neat, clean and free of all trash and debris, and all

**SECTION 329323.33**  
**RAIN GARDEN PLANTS**

reasonable precautions shall be taken to avoid damage to existing plants, turf, structures, and private property.

- B. Remove all tags, labels, strings and wire from the plant materials, unless otherwise directed by the Engineer.
- C. Final cleanup shall be the responsibility of the Contractor and consist of removing all trash and materials incidental to the project, including off-site disposal.
- D. It will be the Contractor's responsibility to supply water if there is none available on the site. Any costs associated with supplying water shall be the responsibility of the Contractor.

**3.4 WARRANTY**

- A. The City will monitor the plantings 3-6 months after installation and if survival of the plantings is below 80%, then the Contractor shall be responsible for replacement of half of the non-surviving plants.
- B. The period of care and replacement shall begin after final inspection and approval of the initial installation of plant material.
- C. The Contractor will not be responsible for plant material that has been damaged by vandalism, fire, flooding, animal herbivory, lack of maintenance by the homeowner, or other activities beyond the Contractor's control.

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**SECTION 329343**  
**TREES**

PART 1 GENERAL

1.1. SUMMARY

- A. Under this specification, the Contractor shall provide all labor, materials, transportation, equipment, and incidentals required for furnishing, correctly locating, planting and watering the trees specified in the appropriate planting schedule for the tree installation areas as indicated by the City, on the construction drawings and/or as directed by the Engineer.
- B. Prior to start of work, the Contractor shall submit a proposed planting schedule, including source of plant material, to the Engineer for review. No work shall be performed until this schedule is approved by the Engineer and the City, at their discretion.
- C. The Contractor shall use whatever equipment is necessary to ensure that earth moving shall be achieved without damage to any private property on or near the installation site. The Contractor will be solely responsible for the repair and restoration required to return any damaged property to its original condition

1.2. RELATED SPECIFICATIONS

- A. Section 334727.12 - Triple Shredded Hardwood Mulch

1.3. PAYMENT

A. Definitions

- 1. Basis of Measurement: Shall be based on the total number of trees (per each) installed.
- 2. Basis of Payment: The contract price bid for trees shall cover the cost of all labor, materials, transportation, equipment, insurance, and incidentals required to furnish and install the trees in full compliance with the requirements of the design plans and specifications, and to perform maintenance and warranty-related activities.

1.4. REFERENCES

- A. Powell, M.A. 1997. *Planting Techniques for Trees and Shrubs*, North Carolina State University Cooperative Extension Service Leaflet No. 601.
- B. Evans, E. 2000. *Planting Trees and Shrubs*, North Carolina State University Horticultural Information Leaflet 8601.
- C. Bardon, R.E., Neill, K., Hardin, R., and Chester-Davis, L., 2004. *Extension's Successful Gardener, Tree Planting Guide*, North Carolina State University Cooperative Extension Service

1.5. SUBMITTALS

**SECTION 329343  
TREES**

- A. Prior to the procurement of the trees required by the project, the availability and sources of the plant material are required for review and approval by the Engineer and the City. Any substitutions of plant species for any reason must be approved by the Engineer and the City.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

- A. All trees should be 1-inch to 2-inch caliper size trees. Exceptions to this must be approved by the Engineer and the City at their discretion.
- B. Material used for guying staked trees should consist of low abrasive material such as nylon or plastic.
- C. The following planting schedule for planting trees shall be followed:

<b>Tree Planting Schedule</b>	
<b><i>Small (&lt; 30 feet tall)</i></b>	
<b>Common name</b>	<b>Genus/species</b>
Ironwood	<i>Carpinus caroliniana</i>
Fringetree	<i>Chionanthus virginicus</i>
Redbud	<i>Cercis canadensis</i>
<b><i>Medium (&lt; 60 feet tall)</i></b>	
<b>Common name</b>	<b>Genus/species</b>
Black Gum	<i>Nyssa sylvatica</i>
Dogwood	<i>Cornus florida</i>
Red Maple	<i>Acer rubrum</i>
<b><i>Large (&gt;60 feet tall)</i></b>	
<b>Common name</b>	<b>Genus/species</b>
Willow Oak	<i>Quercus phellos</i>
River Birch	<i>Betula nigra</i>
White Oak	<i>Quercus alba</i>

**PART 3 EXECUTION**

**3.1 GENERAL**

- A. All plant material shall conform to the current issue of the American Standard for Nursery Stock published by the American Association of Nurserymen.
- B. Plant material must be selected from certified nurseries that have been inspected by state and/or federal agencies. Nursery inspection certificates shall be furnished to the Engineer upon request.
- C. The nursery supply source shall be from the Piedmont physiographic province, and not more than 200 miles from the site.

**SECTION 329343**  
**TREES**

- D. The Contractor will arrange for the Engineer, and the City at their discretion, to inspect the tree stock before installation.
- E. The Engineer and the City, at their discretion, shall reserve the right to reject tree stock at the site that is dead, dying or appears unhealthy. In addition, all plant material that has been improperly maintained, dug, transported or handled in such a way as to impair its appearance or health will be rejected. Plant material collected from the wild is prohibited.
- F. Water used in the establishment or caring of plants and seed shall be free from any substance that is injurious to plant life.

3.2 PLANTING

A. Balled and Burlapped or Large Container Trees

1. All areas disturbed by construction shall be planted in accordance with the appropriate planting schedule, based on sun exposure (Full or Partial Shade).
2. The Contractor shall refer to the construction plans, plant schedules, and details on the plans for specific spacing requirements.
3. In the plant schedules and details, the Contractor shall use the overall spacing figures to determine the spacing between each species of vegetation.
4. Dig a shallow, broad planting hole two times as wide as the diameter of the root ball/container, but only as deep as the root ball. Measure the proper depth of the hole from the trunk flare to the bottom of the ball (see B below). All planting holes shall be dug deep to properly align root collar with the soil surface.
5. Identify the trunk flare. The trunk flare is where the roots spread at the base of the tree. This point should be partially visible after the tree has been planted. If the trunk flare is not partially visible, remove some soil from the top of the root ball.
6. Place the tree at the proper height. Before placing the tree in the hole, check to see that the hole has been dug to the proper depth, and no more. It is better to plant the tree a little high, 1-2" above the base of the trunk flare, than to plant it at or below the original growing level. To avoid damage when setting the tree in the hole, lift the tree by the root ball, and never by the trunk.
7. Straighten the tree in the hole. Before backfilling, view the tree from several directions to confirm the tree is straight.
8. Fill the hole, gently but firmly. Fill the hole about 1/3 full and gently but firmly pack the soil around the base of the root ball. Then cut and remove the string, wire and burlap from around the trunk and top 2/3 of the root ball. Do not to damage the trunk or roots in the process. Fill the remainder of the hole, taking care to firmly pack soil to eliminate air pockets that may cause roots to dry out. To avoid this problem, add the soil a few inches at a time and settle with water. Continue this process until the hole is filled and the tree is firmly planted. Continue to straighten tree as fill is added. Applying fertilizer at the time of planting is not recommended.
9. Stake the tree, if necessary. If staking is necessary for support, two stakes used in conjunction with a wide flexible tie material will hold the tree upright, provide flexibility, and minimize injury to the trunk. Do not drive stakes into root ball. Remove support staking and ties after the first year of growth. Leave protective staking in place as long as necessary.
10. Water the tree with at least 15 gallons of water.
11. Mulch the base of the tree with 3-4 inches of hardwood mulch, no more than 4 inches. When

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placing mulch, care should be taken so that the actual trunk of the tree is not covered. A mulch-free area, one to two inches wide at the base of the tree, is sufficient to avoid moist bark conditions and prevent decay.

3.3 MAINTENANCE

- A. During planting, all areas shall be kept neat, clean and free of all trash and debris, and all reasonable precautions shall be taken to avoid damage to existing plants, turf, structures, and private property.
- B. Remove all tags, labels, strings and wire from the plant materials, unless otherwise directed by the Engineer.
- C. Final cleanup shall be the responsibility of the Contractor and consist of removing all trash and materials incidental to the project, including off-site disposal.
- D. It will be the Contractor's responsibility to supply water if there is none available on the site. Any costs associated with supplying water shall be the responsibility of the Contractor.

3.4 WARRANTY

- A. The City will monitor the plantings 3-6 months after installation and if survival of the plantings is below 90%, then the Contractor shall be responsible for replacement of half of the non-surviving plants.
- B. The period of care and replacement shall begin after final inspection and approval of the initial installation of plant material.
- C. The Contractor will not be responsible for plant material that has been damaged by vandalism, fire, flooding, animal herbivory, lack of maintenance by the homeowner, or other activities not in the Contractor's control.

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**SECTION 334616.19**  
**GUTTER CONNECTION TO RAIN GARDEN**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Under this specification, the Contractor shall provide all labor, materials, transportation, equipment, and incidentals required for directing identified gutter downspout outflows to the rain gardens. That includes furnishing, and correctly installing the downspout adapter and corrugated black HDPE pipe for above-ground connections and downspout filter, downspout adapter, 4" corrugated black HDPE pipe and screened outfall for buried connections, that form the connections between the gutter downspouts, as identified by the City on site and the rain garden at each site, as indicated by the City, on the construction drawings and/or as directed by the Designer.
- B. Contractor is responsible for ensuring that the necessary couplings or connections to existing gutter systems, whatever the dimensions, will function properly.
- C. The Contractor shall use whatever equipment is necessary to ensure that earth moving shall be achieved without damage to any private property on or near the installation site. The Contractor will be solely responsible for the repair and restoration required to return any damaged property to its original condition

**1.2 RELATED SPECIFICATIONS**

- A. Section 312000 Earth Moving

**1.3 PAYMENT**

- A. Definitions
  - 1. Basis of Measurement: Shall be based on the total number of linear feet of pipe installed.
  - 2. Basis of Payment: The contract price bid for gutter connection to rain gardens shall cover the cost of all labor, materials, transportation, equipment, insurance, and incidentals required to furnish and correctly install the connection in full compliance with the requirements of the design plans and specifications to perform warranty-related activities.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

- A. The downspout filter shall contain an angled, self-cleaning grate that filters leaves and debris from the downspout before it can enter the buried drain pipe. The grate shall divert leaves and debris while allowing water to flow through and drain properly. The filter shall also have an adapter that will connect to the 4" corrugated pipe, as shown in the plan detail. Exceptions to this description must be approved by the Designer and the City at their discretion.
- B. The 4" corrugated plastic HDPE pipe shall be flexible, with no perforations.
- C. The screen shall be aluminum screen like that used for household door or window screen repair, such as 18 x 16 mesh count .011 gauge screen.
- D. The fastener for the screen to the end of the 4" corrugated pipe shall be a cable or zip tie that can secure the screen to the end of the pipe so that it will not be washed off by pipe flow.

**SECTION 334616.19**  
**GUTTER CONNECTION TO RAIN GARDEN**

**PART 3 EXECUTION**

**2.1 GENERAL**

- A. The type of gutter to be connected to the rain garden should be determined and an appropriately sized gutter downspout filter selected.
- B. The downspout shall be connected to the rain garden after the rain garden has been constructed and stabilized.
- C. The trench should be dug between the rain garden and the gutter to a sufficient depth such that there is 4"-6" of soil from the top of the 4" corrugated pipe to the ground surface after the 4" corrugated pipe trench is backfilled.
- D. The existing gutter shall be shortened to accommodate the installation of the downspout filter.
- E. The pipe shall be laid in the trench and the downspout filter attached to the upstream end. The screen shall be attached to the downstream end of the pipe with a cable tie.
- F. The downstream end of the pipe shall be placed such that the outflow exits the pipe directly onto the upstream end of the 2"-4" cobble installed previously in the rain garden.

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**SECTION 334727.12**  
**TRIPLE SHREDDED HARDWOOD MULCH**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Under this specification, the Contractor shall furnish and place triple shredded hardwood mulch in accordance with the plans, specifications, and directions of the Engineer.
- B. The Contractor shall use whatever equipment is necessary to ensure that earth moving shall be achieved without damage to any private property on or near the installation site. The Contractor will be solely responsible for the repair and restoration required to return any damaged property to its original condition

**1.2. RELATED SPECIFICATIONS**

- A. Section 334727.13 – Rain Garden Media
- B. Section 312000 – Earth Moving

**1.3. UNIT PRICE WORK – MEASURE AND PAYMENT**

- A. Definitions
  - 1. Basis of Measurement: Cubic Yards (CY)
  - 2. Basis of Payment: Includes the work described in this specification section and associated project drawings. Includes all materials, transportation, labor, equipment, tools, etc., required to complete the work.

**1.4. SUBMITTALS**

- A. The Contractor shall furnish a sample of the triple shredded hardwood mulch (one - one pound zip-lock bags labeled with Contractor's name and contract number) before starting work for approval by the Engineer. No mulch shall be delivered until the approval of samples by the Engineer. The Engineer reserves the right to reject on or after delivery any materials which do not, in his/her opinion, meet these specifications.

**1.5 DELIVERY STORAGE AND HANDLING:**

- A. Storage and Handling Requirements:
  - 1. Triple shredded hardwood mulch applied to rain garden areas must be free of soil.

**PART 2 PRODUCTS**

**2.1 MATERIAL**

- A. Triple shredded hardwood mulch shall consist of natural wood and bark from hardwood trees that have been milled to a maximum 4 in. particle size. Triple shredded hardwood

**SECTION 334727.12**  
**TRIPLE SHREDDED HARDWOOD MULCH**

mulch shall contain no more than 20% hardwood sawdust and negligible amounts of other woody materials. Mulch shall be shredded and aged a minimum of 6 months. The pH factor shall range from 4 to 6.

**PART 3 EXECUTION**

**3.1 METHOD**

- A. Triple shredded hardwood mulch shall not be applied until completion of all earth moving, excavation, and grading activities. Triple shredded hardwood mulch shall be applied to a uniform depth of 4 inches and shall be so distributed as to create a smooth, level cover. Triple shredded hardwood mulch shall not be placed within two (2) inches of tree and shrub stems. Plants shall not be covered. Triple shredded hardwood mulch is the only acceptable mulch.

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**SECTION 334727.13  
RAIN GARDEN MEDIA**

PART 1 GENERAL

1.1. SUMMARY

- A. Under this specification, the Contractor shall provide all labor, materials, transportation, equipment, insurance, and incidentals required for furnishing, amending (if required), placing and preparing the engineered soil for the rain garden facilities as shown on the Contract Drawings and/or as directed by the Engineer.
- B. The Contractor shall use whatever equipment is necessary to ensure that earth moving shall be achieved without damage to any private property on or near the installation site. The Contractor will be solely responsible for the repair and restoration required to return any damaged property to its original condition

1.2. RELATED SPECIFICATIONS

- A. Section 312000 – Earth Moving
- B. Section 334727.12 – Triple Shredded Hardwood Mulch

1.3. UNIT PRICE WORK – MEASURE AND PAYMENT

A. Definitions

- 1. Basis of Measurement: Cubic Yards (CY)
- 2. Basis of Payment: Includes the work described in this specification section and associated project drawings. Includes all materials, labor, transportation, equipment, tools, etc., required to complete the work.

1.4. SUBMITTALS

A. Action Submittals:

- 1. Product Data: Contractor must submit standard sieve analysis to Engineer for written approval prior to placement of rain garden media.
- 2. Product Data: Contractor must submit laboratory analysis results to engineer verifying chemical composition prior to placement of the rain garden media.
- 3. The Contractor shall furnish a sample of the rain garden media (one - one pound zip-lock bags labeled with Contractor's name and contract number) before starting work for approval by the Engineer. No rain garden media shall be delivered until the approval of samples by the Engineer. The Engineer reserves the right to reject on or after delivery any materials which do not, in his/her opinion, meet these specifications.
- 4. All laboratory analyses should be performed by an NCDENR certified lab.

- B. Material failing the stated criteria shall not be incorporated into the work and shall be removed from the site at the Contractor expense.

1.5. DELIVERY STORAGE AND HANDLING:

A. Storage and Handling Requirements:

Rain Garden Media  
334727.13 - 1

**SECTION 334727.13  
RAIN GARDEN MEDIA**

1. Rain garden media applied to rain garden must be free of soil.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

- A. Rain Garden Media. The rain garden media is a mixture of organic matter, fines and sand consisting of the following:

<b>ITEM</b>	<b>COMPOSITION BY VOLUME</b>	<b>REFERENCE</b>
Fines (Clay and Silt)	8-12%	
Sand	85-88%	<i>ASTM C33 Fine</i>
Organic Matter	3-5%	

1. The rain garden media shall be a homogeneous mix, free of stones, stumps, roots or other similar objects larger than two inches (2") excluding mulch. No other materials or substances shall be mixed or dumped within the rain garden that may be harmful to plant growth or prove a hindrance to the planting or maintenance operations. The Rain Garden Media shall be free of Bermuda grass, Quackgrass, Johnson grass, Mugwort, Nutsedge, Poison Ivy, Canadian Thistle, Tearthumb, Phragmites or other noxious weeds.

The Rain Garden Media shall meet the following criteria:

<b>ITEM</b>	<b>CRITERIA</b>
Corrected pH	4.5-7
P-Index	Between 10 and 30
Soluble Salts	Less then 1.0 mmhos cm <sup>-1</sup>
Cation Exchange Capacity (CEC)	5-20 meq/100g

2. Rain Garden Media that fails to meet the minimum requirements shall be replaced at no additional cost to the City. Mixing of the corrective additives to the Rain Garden Media is incidental and shall be at no additional cost to the City.
3. Mixing of the rain garden media to a homogeneous consistency shall be done to the satisfaction of the Engineer. Rototilling any type of amendment to the rain garden media is insufficient and destroys the unique matrix of the soil and is not be an acceptable mixing procedure.

**2.2 SOURCE QUALITY CONTROL**

**SECTION 334727.13**  
**RAIN GARDEN MEDIA**

A. Tests: See 1.4 Submittals above.

**PART 3 EXECUTION**

**3.1 RAIN GARDEN MEDIA**

- A. The rain garden media shall be placed and graded by operating ~~on~~ the ground adjacent to the rain garden. No equipment shall be used within the perimeter of the rain garden before, during or after the placement of the rain garden media. However, if the configuration of the facility is exceedingly large, wide track or marsh track equipment or light equipment with turf type tires operating within the perimeter of the facility may be used to place and grade the rain garden media.
  
- B. The rain garden media shall be placed in horizontal layers not to exceed 6 inches (6") for the entire area of the rain garden. The rain garden media shall be compacted by wetting the entire area of the rain garden after each lift of rain garden media is placed. Water for wetting shall be applied by spraying or sprinkling. If the rain garden media becomes contaminated by onsite soils during the construction of the facility, the contaminated material shall be removed and replaced with uncontaminated rain garden media at no additional cost to the City. Final grading of the rain garden media shall be performed after a twenty-four (24) hour settling period. Final elevations shall be within one half inch (0.5") of elevations shown on the Contract Plans.
  
- C. The Contractor shall sign a statement saying that each rain garden has been successfully installed, as work progresses. The Contractor shall, if requested by the Engineer, provide sufficient staff and equipment to check any or all sites to ensure that final elevations and areas are correct. All sites will be reviewed by the Engineer in a timely manner, within a week of being constructed. If the rain gardens are not constructed to the elevations and dimensions indicated on the plans, then at the discretion of the Engineer, the Contractor shall be required to correct identified dimensions of the constructed site that are not compliant with the plans and specifications.. All site corrections for the project shall be completed by the Contractor within 200 days of the Notice to Proceed, or the Contractor shall pay the City of Durham \$400/day until all the site corrections have been completed.

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**SECTION 334727.14  
COBBLE**

**PART 1 GENERAL**

**1.1 SUMMARY**

Under this specification, the Contractor shall provide all labor, materials, transportation, equipment, insurance, and incidentals required for furnishing and installing 2-inch to 6-inch cobble at the specified rain garden inlets, as specified on the plans or as directed by the Engineer.

**1.2 RELATED SPECIFICATIONS**

- A. Section 312000 – Earth Moving
- B. Section 334616.19 Gutter Connection to Rain Garden
- C. Section 334727.13 Rain Garden Media

**1.3 UNIT PRICE WORK – MEASURE AND PAYMENT**

A. Definitions

- 1. Basis of Measurement: Cubic Yards (CY)
- 2. Basis of Payment: Includes the work described in this specification section and associated project drawings. Includes all materials, labor, transportation, equipment, tools, etc., required to complete the work.

**1.4 SUBMITTALS**

A. Action Submittals:

- 1. Product Data: The Contractor will locate potential sources for the Cobble. The Contractor will not be granted an extension of time or extra compensation due to delay caused by sampling, testing, approval or disapproval of material under the requirements of the Specification. All Cobble deliveries will be visually inspected by the Engineer to determine compliance with these Specifications. Source of rock shall be from an approved mining operation with up-to-date regulatory permits. Product Data: Due to the anticipated quarry preparatory time, and/or demand for the rock as specified in the Contract, it shall be the contractor's responsibility to make all necessary arrangements with the source of supply in a timely fashion, so that the contractor shall maintain an adequate supply of rock material and that work shall not be unnecessarily delayed due to insufficient supply.

- B. Material failing the stated criteria shall not be incorporated into the work and shall be removed from the site at the Contractor expense.

**1.5 DELIVERY STORAGE AND HANDLING:**

- A. Cobble shall be delivered, stored and handled so that no damage occurs to any installation site property. The Contractor shall use whatever equipment is necessary to ensure that the installation of the cobble material shall be achieved without damage to any private property on or near the installation site.

**SECTION 334727.14**  
**COBBLE**

- B. The Contractor will be solely responsible for the repair and restoration required to return any damaged property to its original condition.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

- A. Cobble material shall range in size from a minimum size of 2 inches for the longest particle dimension to a maximum of 6 inches for the longest particle dimension.
- B. Cobble shall be composed of well-graded mixture of stone size so that 50% of the pieces, by weight, shall be larger than the D50 size of 4 inches. A well graded mixture as used herein is defined as a mixture composed primarily of larger stone sizes but with a sufficient mixture of other sizes to fill the small voids between the cobbles. Grading of Cobble pieces shall be controlled by visual inspection or as directed by the Engineer.

**PART 3 EXECUTION**

- 3.1 The Contractor shall install the cobble material, without incurring damage to any part of the site, per the construction drawings.

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