



CHARLOTTE

STORM WATER SERVICES

PROJECT MANUAL

FOR

COLISEUM CREEK STREAM REPAIR

PROJECT NUMBER:

672-10-005

BID NUMBER:

FY23-IFCON-07

CITY OF CHARLOTTE, NORTH CAROLINA

ADVERTISEMENT DATE: MAY 5, 2023

2018 NCDOT STANDARD SPECIFICATIONS
v.210511

PROFESSIONAL ENGINEER SEAL

(Project Special Provisions Prepared for the City of Charlotte, Storm Water Services, 600 East Fourth Street,
Charlotte, North Carolina 28202):

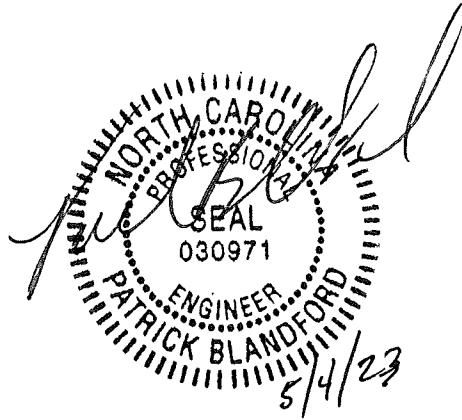


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INVITATION TO BID

The City of Charlotte (hereinafter the “City”) will receive sealed bids for the following Project:

PROJECT NAME: Coliseum Creek Stream Repair
PROJECT NUMBER: 672-10-005

PRE-BID DATE AND TIME: May 16, 2023, 1:00 PM

PRE-BID LOCATION: Teams Only
Direct Video Conference Link:
https://teams.microsoft.com/l/meetup-join/19%3ameeting_MTUzMzMyOWUtZWl0Yy00NWVlTikMDQtNGVjYjdjNTYxMjU3%40thread.v2/0?context=%7b%22id%22%3a%22392a0ee-6ccb-49c5-94b5-f5e6d8a665d6%22%2c%22oid%22%3a%220e6a2a2d-a72a-4c2c-b8c3-bba4f7c1543b%22%7d

OR

Phone Number: +1 872-256-4172 call in number
Phone Conference ID: (975 788 063#)

The Pre-Bid meeting is not mandatory, but attendance is strongly encouraged.

BID SUBMITTAL DATE AND TIME: May 30, 2023, 1:00 PM

BID SUBMITTAL LOCATION: City of Charlotte – Storm Water
5100 Brookshire Boulevard,
Charlotte, NC 28216
ATTN: Katherine Osborne

OR

Katherine.Osborne@charlottenc.gov

This is an informal solicitation with no formal bid opening and, as such, construction and repair contracts costing at least \$30,000 but less than \$500,000 are not subject to public inspection until after the contract is awarded in accordance with NC §143-131.

DESCRIPTION OF WORK:

This project is located near the intersection of Price Lane and Greenmarket Drive and is bordered by Speer Boulevard, West Tyvola Road, Parkway Plaza Boulevard, and Yorkmont Road. The drainage system is open channel that was a previous stream restoration project. This project will repair one of the previously restored channel reaches. Construction includes grading, in stream structures, plantings, and erosion control.

ENGINEERING ESTIMATE: The estimated cost of this Project is **\$267,672**.

Bidders must be properly licensed under North Carolina state law to perform the work. A **5%** bid security is required with each bid that equals or exceeds **\$300,000**.

BID FORM: Complete, sign and submit the forms on pages 37 through 44 in the “Itemized Bid Forms and Supplements” section by or before the due date and time.

PROJECT INFORMATION REQUEST:

For information regarding this Invitation to Bid, contact as follow:

Katherine Osborne, Contracts Administrator
5100 Brookshire Boulevard, Charlotte, NC 28216
Direct Phone: (704) 353-1780
Email: katherine.osborne@charlottenc.gov
Website: <https://charlottenc.gov/DoingBusiness/Pages/ContractOpportunities.aspx>

Please submit questions or inquiries in writing at least **seven (7) calendar days** before the Bid Submittal Date. Questions or inquiries past this deadline may not be addressed by the City prior to the Bid Due Date.

The City reserves the option of extending the due date as may be necessary to obtain adequate proposal activity. The City reserves the right to reject any and all bids and to waive any informalities or technicalities as it may deem to be in its best interest.

CHARLOTTE BUSINESS INCLUSION (CBI) PROGRAM:

This project is subject to the requirements of the City's Charlotte Business INclusion Program to promote diversity, inclusion, and local business opportunities in the City's contracting and procurement process for Minority, Women, and Small Business Enterprises headquartered in the Charlotte Combined Statistical Area.

Following Charlotte Business INclusion goals have been established for this project:

MBE = 7.00%

SBE = 18.00%

INSTRUCTIONS TO BIDDERS

1. CONTRACTOR'S LICENSE

Bidders shall be properly licensed under North Carolina state law to perform the Work specified in the Bidding Documents and per **SECTION 102-14** of the NCDOT Standard Specifications. Bids received from bidders not meeting the applicable Contractors' licensure requirements as required by law and as determined by the Engineer's estimate may be considered non-responsive and may not be considered for award.

1.1 CONTRACTOR'S REGISTRATION FOR LANDSCAPE PROJECTS

The City requires that Contractors performing landscape work be registered with the North Carolina Landscape Contractors Registration Board (NLCRB). The NLCRB registrant must be a full-time employee of the Bidder. The successful Bidder must maintain a full-time employee with the required registration during the life of the Contract.

2. BIDDER QUALIFICATIONS

Bidders must be experienced in the class of work proposed who can refer to projects of similar magnitude and scope that have been successfully completed by them within the past three (3) years. Bidders to whom award of a Contract is under consideration may be required to submit to the City, upon request, a properly executed Contractor's Qualifications Statement. The Contractor's Qualifications Statement may include, but is not limited to, the Bidder's past projects, financial capability, staff qualifications and availability, references, litigation or claims against the Bidder, list of equipment available to execute the Work and NCDOT pre-qualification status. The City reserves the right to request such qualifications from Bidders as part of its bid evaluation. The Bidder's failure to submit the requested Qualifications Statement within the timeframe specified by the City may be grounds for bid rejection.

3. SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK

By submitting a bid, Bidders certify to have carefully examined the Project site and familiarized themselves with the existing conditions on the Project, affecting the cost and execution of the work as described in **Section 102-6** of NCDOT Standard Specifications.

4. FORMS, CERTIFICATIONS, AND EXECUTION OF BID

Bidders must complete each form, certification, and the Execution of Bid provided the Bidding Documents. Failure to complete and submit the required forms, certifications, and Execution of Bid may be grounds for bid rejection.

5. BID SECURITY

A **five-percent (5%)** bid security is required with each bid that equals or exceeds **\$300,000**. Bid Bond or Bid Deposit, made payable to the City of Charlotte, must be provided in accordance with **Section 102-10** of NCDOT Standard Specifications.

6. REJECTION OF BIDS AND DISQUALIFICATION OF BIDDERS

Rejection of Bids and Disqualification of Bidders will be provided in accordance with **Sections 102-14 and 102-15** respectively of NCDOT Standard Specifications.

7. AWARD AND EXECUTION OF CONTRACT

Award and execution of Contract will be in accordance with **Section 103** of NCDOT Standard Specifications. The City will award the contract or contracts conditioned upon funds being available for construction and other governmental approvals as may be required. The City reserves the right to accept Alternates in any order or combination. The City further reserves the right to determine the low bidder on the basis of the Total Base Bid with Accepted Alternates.

8. BONDS AND INSURANCE

For bids equal to or greater than **\$300,000**, the successful bidder shall provide the City with performance and payment bonds each in the amount equal to **one hundred percent (100%)** of the contract amount. Bonds shall be submitted to the City upon ten (10) calendar days of award of the Contract and shall be in conformance with NC GS 44A-33. Failure to provide acceptable bonds within ten (10) calendar days of award of the Contract shall be just cause for forfeiture of the bid bond or bid deposit and rescinding the award of the Contract. Award may then be made to the next lowest responsive, responsible bidder or the Project may be re-advertised at the City's sole discretion.

The Contractor shall submit to the City within ten (10) calendar days of recommendation of award of the Contract a certificate of insurance in the minimum amounts required in the Contract Documents.

9. PRE-CONSTRUCTION CONFERENCE

A pre-construction conference will be scheduled as soon as practical after award of the Contract. The Contractor shall attend the pre-construction conference with the prospective project superintendent, any anticipated major subcontractors, major suppliers, and anticipated sources of materials such as concrete, asphalt, select and borrow material.

The contractor shall provide a quality control program that details the methods and procedures to be taken to assure that all materials and completed construction work required for the project conform to the Construction Documents. See Contractor Quality Control.

A proposed progress schedule in a form satisfactory to the Construction Manager and a statement of the anticipated monthly progress payments showing the percent of progress each month shall be submitted by the Contractor to the City. The schedule shall detail the entire project and incorporate a Critical Path Method (CPM) analysis. The Contractor shall also provide at least two (2) local telephone numbers that may be used to contact the Contractor or the Contractor's authorized representative in the event of an emergency after normal business hours. The Contractor shall also provide the name of the Contractor's on-site representative who is OSHA certified for trenching, shoring, and confined space entry and CDOT/SMD certified for trenching, shoring, and confined space entry. The Contractor must maintain a full-time employee with the required certification during the term of the contract.

10. NOTICE TO PROCEED

The City will issue a Notice to Proceed (NTP) to the Contractor upon award and execution of the contract. The Contractor shall not perform any Work prior to the date on which the NTP commences. The City reserves the right to issue an Administrative Notice to Proceed authorizing the Contractor to place orders for products requiring long lead times, or to obtain certain permits prior to beginning any Work. If an Administrative Notice to Proceed is issued, the Contractor shall not perform any Work prior to the date on which the Notice to Proceed commences.

11. CHARLOTTE BUSINESS INCLUSION POLICY

Pursuant to Charlotte City Council's adoption of the Charlotte Business INclusion (CBI) Policy, the Charlotte Business INclusion program promotes diversity, inclusion, and local business opportunities in the City's contracting and procurement process for Minority, Women, and Small Business Enterprises (M/W/SBEs) headquartered in the Charlotte Combined Statistical Area (CSA). The CBI Policy is posted at: www.charlottebusinessinclusion.com.

The City of Charlotte is committed to promoting opportunities for maximum participation of certified M/W/SBEs on City funded contracts at both the Prime and Subcontract level. For SBE participation to count towards a Goal, SBEs must meet both the certification and geographic requirements as detailed throughout this solicitation and in the CBI Policy.

The Charlotte CSA refers to the Charlotte-Gastonia-Salisbury Combined Statistical Area in effect as of April 8, 2013, consisting of: (a) the North Carolina counties of Anson, Cabarrus, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, and Union; and (b) the South Carolina counties of Chester, Lancaster, and York. This is one criteria used by Charlotte Business INclusion to determine eligibility to participate in the program.

Firms are highly encouraged to consider any and all possibilities for M/W/SBE participation. A complete list of City certified SBEs is available at: www.charlottebusinessinclusion.com.

variation of those substances assigned the chemical abstracts service (CAS) numbers 65996-92-1, 65996-93-2, 65996-89-6, 8007-45-2, 64742-90-1, or 69013-21-4.

12. DEFINITION

Whenever the following terms are used in the NCDOT Standard Specifications, in any of the Contract Documents, or in the plans, the intended meaning of such terms shall be as follows:

- 1) **"Chief Engineer"**, or **"State Highway Administrator"** shall mean the "City Engineer"
- 2) **"Alternate"** or **"Alternate Bid"** shall mean the amount stated in the Bid which may be added to or subtracted from the Base Bid amount if such Alternate(s) are accepted by the City.
- 3) **"Total Amount Bid"** or **"Total Base Bid"** shall mean the correct sum total obtained by adding together the amounts bid for every item in the proposal

- including contingencies or allowances, but excluding Alternates.
- 4) **“Board of Transportation”** shall mean “City Council”
 - 5) **“City”** shall mean the “City of Charlotte, North Carolina”; the City is the Project Owner
 - 6) **“City Engineer”** shall mean the “Program Director of the City of Charlotte Storm Water Services”.
 - 7) **“City Standard”** shall mean the latest edition of the applicable “Charlotte Land Development Standards Manual (CLDSM)”, “Charlotte-Mecklenburg Storm Drainage Design Manual”, “Charlotte Mecklenburg BMP Design Manual” and “Charlotte-Mecklenburg Utility Department Policies, Procedures, Standards and Specifications”
 - 8) **“Construction Manager”, “Engineer”, “Division Engineer”** or **“Resident Engineer”** shall mean the City Engineer’s duly authorized Construction Manager to oversee the construction of the project
 - 9) **“Contract”** shall mean the reciprocal undertakings, obligations, and rights of the City and the Contractor evidenced by the executed agreement and other Contract Documents between the City and the Contractor, covering the performance of and compensation of the Work.
 - 10) **“Contract Amount”, “Total Contract Amount”** or **“Contract Sum”** shall mean the Total Base Bid plus Alternates accepted by the City.
 - 11) **“Contract Documents”** shall consist of the Project Manual, the Contractor’s executed bid and forms, Acceptance by the City, and any change orders issued after execution of the contract.
 - 12) **“Date of Availability”** shall mean “Notice to Proceed Date”
 - 13) **“Department”, “Department of Transportation”, “Division of Highways”,** and **“Raleigh Central Office”** shall all mean “City of Charlotte Storm Water Services”.
 - 14) **“Electronic Bid”** shall mean the “Electronic Bid Form” and process as defined in Section 00 10 00 – Instructions to Bidders, Article 3 – Bidding Procedures, Subsection 3.3. – Bid Form.
 - 15) **“Project Manual”** shall mean the complete set of bidding documents issued by the City of Charlotte Storm Water Services to include the Invitation to Bid, Instructions to Bidders, Bid Forms, sample project forms, conditions and special provisions of the contract, addenda issued prior to the execution of the contract, and drawings.
 - 16) **“State”** shall mean “City of Charlotte”
 - 17) **“State Contract Officer”** shall mean “Contract Officer”
 - 18) **“Supplemental Agreements”** shall mean “Change Orders”

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

STANDARD PROVISIONS

1. NCDOT STANDARD SPECIFICATIONS

2018 NCDOT Specifications: The January 2018 North Carolina Department of Transportation (NCDOT) Standard Specifications for Roads and Structures, herein referred to as the “NCDOT Standard Specifications,” is part of the Contract Documents and incorporated herein by reference. The Contract Documents are intended to be complementary. In case of any conflict among the Contract Documents that cannot otherwise be resolved, the order of precedence shall be as set forth in Section 105-4 of the NCDOT Standard Specifications.

The NCDOT Standard Specifications are hereby modified as follows:

Section #	Modification
101-3	Modify the Definitions as provided in Article 12 of INSTRUCTION TO BIDDERS of this Project Manual.
102-1	Delete lines 26 through 27.
102-2	Delete this section in its entirety.
102-3	Delete lines 8 through 10.
102-7	Delete 3 rd sentence in the second paragraph and replace it with “Contact <i>City of Charlotte</i> office”
102-8(B)(9)	In line 14, replace “14 calendar days” with “10 calendar days”.
102-9(C)	Delete lines 6 through 8. In line 22, replace “14 calendar days” with “10 calendar days”.
102-10	In line 39, replace “14 calendar days” with “10 calendar days”. Delete lines 22 to 27.
102-14(A) and 103-2 (A)(4)(a)	In addition to “ <i>State Funded Projects</i> ”, these sections also apply to “ <i>City Funded Projects.</i> ”
102-15 (J)	Delete this sentence in its entirety and replace with the following: “ <i>Failure to satisfy the City’s Charlotte Business Inclusion Program or failure to satisfy NCDOT’s Minority, Women or Disadvantaged Business Enterprise requirements, whichever program is applicable as required in the project Bidding Documents.</i> ”
103-3(A)	Delete the reference to “ <i>North Carolina General Statute 136-28.1</i> ” and replace with the reference to “ <i>North Carolina General Statute 143-129.1</i> ”
103-3(A)(5)	Delete the “ <i>48 hours</i> ” notice of bid withdrawal and replace with “ <i>72 hours</i> ”.
103-3(B) and 103-3(C)	Delete these sections in its entirety and replace applicable procedures established in North Carolina General Statutes 143-129.1.
103-3(D)	In line 32, replace “14 calendar days” with “10 calendar days”.
103-7	In line 5, replace “14 calendar days” with “10 calendar days”.
103-9	In line 15, replace “14 calendar days” with “10 calendar days”.
103-4 (A)	In this section, replace “60 days” with “90 calendar days”.
103-4(B)	Delete this section in its entirety and replace with “ <i>Commercial Nondiscrimination Policy</i> ” of <u>Article 21</u> of STANDARD PROVISIONS of this Project Manual.
104-8(A)(1)	Delete line 37 through 43 and replace with the following: When the Engineer and the Contractor agree to the prices to be paid, the agreement will set forth in a change order. The Contractor may begin work by written authorization from Engineer before executing the change order.

104-12(B)	Delete following part from line 45: “and the State Value Management Engineer”
104-12(D)	Delete following part from line 11-12: “and the State Value Management Engineer at ValueManagementUnit@ncdot.gov ”
104-12(E)	Delete following part from line 23: “and the State Value Management Engineer at ValueManagementUnit@ncdot.gov ”
104-12(F)	Delete following part from page 1-43, line 45: “and the State Value Management Engineer”
107-15	Delete this section in its entirety and replace with Insurance Requirements of <u>Article 26</u> of STANDARD PROVISIONS of this Project Manual.
107-24	Delete this section in its entirety and replace with the “Dispute Resolution” <u>Article 29</u> of STANDARD PROVISIONS of this Project Manual.
108-4	Insert the following after Line 29: The Contractor’s project superintendent and other individuals representing the Contractor who are knowledgeable of the Contractor’s proposed progress schedule or who will be in charge of major items of the work shall attend the construction conference.
108-6	On page 1-71, line 41 through 42, delete the reference of “NCGS § 136-29” and replace with the reference of “ <u>Article 29</u> Dispute Resolution of STANDARD PROVISIONS”.
108-10(B)(5)	Delete this section in its entirety.
108-13	Delete this section in its entirety and replace with the Termination of <u>Article 28</u> of STANDARD PROVISIONS of this Project Manual.
109-11	Delete this section “ <i>Interest on Final Payment</i> ” in its entirety.

2. ERRATA

(10-16-18) (Rev.2-16-21)

Z-4

Revise the *2018 Standard Specifications* as follows:

Division 6

Page 6-7, Article 609-1 DESCRIPTION, line 29, replace article number “609-10” with “609-9”.

Division 7

Page 7-27, Article 725-1 MEASUREMENT AND PAYMENT, line 4, replace article number “725-1” with “724-4”.

Page 7-28, Article 725-1 MEASUREMENT AND PAYMENT, line 10, replace article number “725-1” with “725-3”.

Division 10

Page 10-78, Article 1056-4 GEOTEXTILES, TABLE 1056-1, Permittivity, Type 2, replace “Table 6^D” with “Table 7^D” and **Permittivity, Type 3^B,** replace “Table 7^D” with “Table 8^D”.

Page 10-121, Article 1076-7, REPAIR OF GALVANIZING, line 8, replace article number “1080-9” with “1080-7”.

Page 10-162, Article 1080-50 PAINT FOR VERTICAL MARKERS, line 1, replace article number “1080-50” with “1080-10”.

Page 10-162, Article 1080-61 EPOXY RESIN FOR REINFORCING STEEL, line 5, replace article number “1080-61” with “1080-11”.

Page 10-162, Article 1080-72 ABRASIVE MATERIALS FOR BLAST CLEANING STEEL, line 22, replace article number "1080-72" with "1080-12".

Page 10-163, Article 1080-83 FIELD PERFORMANCE AND SERVICES, line 25, replace article number "1080-83" with "1080-13".

Division 17

Page 17-15, Article 1715-4 MEASUREMENT AND PAYMENT, lines 42-44, replace the second sentence with the following:

An example is an installation of a single 1.25 inch HDPE conduit would be paid as:
Directional Drill (1)(1.25") Linear Foot

3. CURB AND GUTTER TAPERS AND TRANSITIONS

The Contractor shall be responsible for constructing concrete curb and gutter end tapers and concrete curb and gutter transitions as shown on the plans and in the specifications, including CLDS 10.19 curb transitions. Payment will be made at the contract unit prices of the adjacent curb and gutter for the various curb types in NCDOT Section 846, "Concrete Curb, Concrete Curb and Gutter, Concrete Gutter, Shoulder Berm Gutter, Concrete Expressway Gutter and Concrete Valley Gutter" and CLDS 10.17 "Curb and Gutter".

4. PIPE JOINTS

Joint Wrap

All rigid pipe shall be installed per NCDOT section 300-6 (A) except that all pipe shall have Type 2 filtration geotextile wrapped around all pipe joints. Extend geotextile at least 12" beyond each side of the joint, overlap ends by 12" minimum. Secure geotextile against the outside of the pipe by methods approved by the Engineer. There will be no separate measurement or payment for the joint wrapping, the price of the work will be included in the price bid for the individual line item.

Joint Wiping

Interior wiping of concrete pipe joints is prohibited. Treatment, including but not limited to, application of mortar, cement, epoxy or other materials used to seal, fill, or cover internal joint gaps without the written permission from the Engineer will not be allowed. Prior to acceptance, the interior surface of the pipe including the joints, shall be 100% visible for inspection. Any material found to be obstructing the evaluation of the condition of the joint may result in pipe replacement, may require an exterior collar or may require internal joint and/or pipe lining at the contractor's expense.

Pipe Video

Pipe videos provide an opportunity to view the quality of the pipe installation and make appropriate repairs in a timely and efficient manner; view internal structural integrity of the joint, sealant and overall condition of installation that is not otherwise available through traditional inspection practices. All closed storm drainage systems will be videoed by a NASSCO certified provider by the City to evaluate the internal condition of the system. Deficiencies will be identified and provided to the Contractor for repair. Once repairs are completed, the Contractor will be responsible for the costs associated with the re-video of the repairs made, including where external repairs were performed. The City will utilize their provider for the re-video service and will deduct the invoiced amount from the final project payment.

5. EXISTING UTILITIES

The City has contacted and notified all involved utility owners of the effect of this Project on their respective utility. Construction plans and anticipated construction schedules have been provided to the utility owners. Each utility owner will be requested to attend the preconstruction conference to discuss potential conflicts and their schedule

for relocation where required. All adjustments or relocations will be made by the utility owner unless otherwise indicated in the Contract Documents.

The owners of utilities in this Project could include:

1. Alltel / Windstream Communications
2. Duke Energy Company
3. Piedmont Natural Gas Company
4. Charlotte-Mecklenburg Utility Department
5. American Telephone & Telegraph
6. Spectrum
7. MCI Communications
8. Charlotte Department of Transportation
9. Xspedius Communications

The Contractors work shall be in accordance with NCGS 87-115, Underground Utility Safety and Damage Prevention Act” (2013-407, s 2.). To assist the Contractor and utility owners in meeting the requirements of this law, there is a service provider called “NC811.” Most major utilities with underground facilities in the State subscribe to this service.

From within North Carolina, dial 811. For calls originating outside (or inside) of North Carolina, the toll free number (800) 632-4949 may be used. NC811 can also be accessed via the Internet at <https://www.nc811.org/> .

The Contractor shall include the cost of any coordination and cooperation of utilities in his bid.

No additional compensation shall be allowed for delays or inconvenience sustained by the Contractor due to utility relocation or adjustments. No additional payment will be made for re-mobilization required by the utility’s failure to relocate a utility at the request of the Contractor.

No additional compensation will be made for excavating near or around existing utilities, for purposes of locating or for preservation. Not all utilities (underground or above ground) will be relocated. Contractor shall consider any mechanized and/or hand digging necessary to preserve integrity of utilities in his unit bid prices.

Where changes to utility facilities are to be made solely for the convenience of the Contractor, it shall be the Contractor’s responsibility to arrange for such changes, and the Contractor shall bear all costs of such changes.

6. UTILITY STREET CUT REGULATIONS (CDOT STREET MAINTENANCE DIVISION)

All street cut permits for this project have already been obtained.

The [current edition at the time of bid](#) of the Charlotte Department of Transportation, Street Maintenance Division; Regulations, Fee Schedule and Procedures for Working in Asphalt and Concrete Pavements, shall apply on all portions of the project unless otherwise specified herein.

The CDOT Street Maintenance Division requires that any Utility Company, Contractor, Developer, or agents thereof engaged in utility excavation in Charlotte street rights-of-way must ensure that a CDOT/SMD excavation certified company representative be present on the job site.

Excavation certification requires a utility crew foreman/lead person to attend a 5-hour class to become familiar with these policies/specifications and CDOT/SMD’s procedures for excavating in Charlotte streets. Once these foremen/lead persons obtain certification, they are placed on an approved Utility Certification List maintained by SMD.

7. CONCRETE

All concrete used on City projects will be required to meet the NCDOT Standard Specifications for Roadways and Structures. In addition the following City requirements apply:

The City of Charlotte or their Independent Testing Laboratory (ITL) will perform all testing for Slump, Air Content, Temperature, and Compressive Strength for City approved/accepted concrete mix designs.

Compressive Strength Quality Assurance for Incidental Concrete:

The following Quality Assurance Specifications shall apply only to incidental concrete used in the construction of this Project. Incidental concrete shall be defined as any concrete not used in the construction of rigid pavement or any concrete that is not an integral part of a structure. The Engineer reserves the right to reject questionable material at any time in lieu of making reduced payment.

Compressive Strength:

All incidental concrete used in the construction of this Project shall be a minimum 3600 PSI strength at twenty-eight (28) days, unless otherwise specified. No adjustment will be allowed for the required use of high-early strength concrete. When the Contractor is requested to use high-early strength concrete in certain areas, he must furnish a copy of the delivery ticket to the Project Inspector prior to allowing traffic to proceed across the item in question before the required seven (7) day curing period.

Concrete will be tested and accepted with respect to compressive strength on the basis of the average test results of concrete test cylinders. The City's testing company will prepare test cylinders in accordance with ASTM C31 and take them to their laboratory for curing and testing. The Contractor is responsible for providing adequate curing boxes, blankets, burlap, if needed. If the average strength of concrete cylinder test results fail to attain the specified minimum compressive strength at twenty-eight (28) days, but meet or exceed 70% of the minimum compressive strength, the Engineer will have the option of instructing the Contractor to replace all concrete represented by those cylinders with concrete meeting specifications or of allowing the concrete to remain in place at a reduced Contract price. The Contract Unit Price for such concrete left in place shall be reduced by the following formula:

- $$\text{Reduced Unit Price} = \text{Contract Unit Price} \times \frac{\text{Avg. Strength of Test Cylinders at 28 Days}}{\text{Specified Minimum Compressive Strength}}$$

In the event that concrete cylinder tests fail to meet minimum compressive strengths at twenty-eight (28) days, the Contractor will have the option of taking cores from the concrete in question at the Contractor's expense. Cores must be taken and tested in accordance with ASTM C42. Cores must be taken thirty-one (31) days after placement of concrete. Cores must be taken and tested by a qualified independent testing laboratory approved by the Engineer. A minimum of three (3) cores shall be taken from questionable concrete, unless otherwise specified by the Engineer. Cores shall be taken from locations selected by the Engineer.

If the average strength of the concrete test results (cylinders and cores) fail to attain seventy percent (70%) of the specified minimum compressive strength at twenty-eight (28) days, all applicable concrete shall be rejected. The Contractor, at no additional cost to the City, shall remove the rejected concrete and replace it with concrete that meets specifications.

The Contractor must submit a Process Control plan for review by the City of Charlotte, including the name of the field person in charge for the contractor during concrete placement per the NCDOT Standard Specifications. This person must be concrete certified per ACI and NCDOT Field Level 1 Concrete.

8. RECLAMATION OF WASTE OR BORROW SOURCES

All removal, disposal, and storage of waste and borrow material for this project will be required to meet the NCDOT Standard Specifications for Roadways and Structures. In addition the following City requirements apply. If any borrow or waste areas are to be utilized, it shall be the responsibility of the Contractor to notify the property owner that the property owner is responsible for any damage occurring at the site, either as part of the agreement with the Contractor, or on his own. The cost of all work of securing the borrow site, sediment control, re-grading and seeding shall be the responsibility of the property owner or contractor per their separate agreement.

The City will not participate in the cost of this reclamation work on the waste or borrow areas. Prior to final payment being made, the Contractor shall obtain a release from the property owner of the borrow or waste site utilized for the Project.

9. HAZARDOUS MATERIALS

If the Contractor encounters any materials considered or suspected of being hazardous, he shall immediately secure the area, discontinue operations, and contact the Charlotte-Mecklenburg Hazardous Materials Coordinator, telephone 704-336-2461 for further instructions. All activities shall be required to meet the NCDOT Standard Specifications for Roadways and Structures – [Section 107-25](#).

10. SEDIMENTATION POLLUTION CONTROL ACT

Certification Requirement

For projects that disturb one or more acres of land and thus require an NPDES General Stormwater Permit for Construction Activities, the prime contractor must provide an employee who has current certification in one or more of the following:

- 1) Charlotte-Mecklenburg Certified Site Inspector
- 2) NCDOT/NCSU's Level 2 Erosion and Sediment Control/Stormwater Certification
- 3) Certified Professional in Erosion and Sediment Control (EnviroCert International)
- 4) Professional Engineer

Documentation of certification shall be submitted at the contract Pre-construction Conference and prior to Notice to Proceed.

The person designated as the certified employee will be responsible for doing the following as it relates to the project:

- Complete erosion control inspection records as specified in the NDPEs General Stormwater Permit for Construction Activities and provide copies of records to the City.
- Coordinate the performance of corrective maintenance to erosion and sediment control measures that are found to not be functioning as intended to minimize sediment loss. Discuss corrective actions deemed necessary with the City's Construction Inspector prior to conducting the work.
- Immediately notify the City's Construction Inspector of visible sediment deposition from the project site into any water body or wetland. Such discharges must be reported to the NC Department of Environmental Quality within 24 hours of discovery.

Financial Responsibility

If this project is subject to the "North Carolina Department of Environmental Quality Sediment Pollution Control Act", the City has already acquired the permit. The Contractor, upon recommendation of award shall complete Part B of the Financial Responsibility/Ownership form provided by the City. The City will then transfer financial responsibility of the erosion control permit to the Contractor. The City of Charlotte will pay the cost of the application fees. The Contractor will be responsible for any fines levied for violation of the approved erosion control plan.

11. CONSTRUCTION STAKES, LINES, AND GRADES

Construction stakes, lines and grades will be provided by the City in accordance with [Section 105-9](#) of the NCDOT Standard Specifications. Surveying will be provided by the City in accordance with the current "Surveying Field Procedures Manual" of the General Services Department.

The Contractor shall request all staking at least FORTY-EIGHT (48) hours in advance of the time that the staking will be required. The Contractor shall be held responsible for the preservation of all stakes and marks, and, if any of the construction stakes or marks have been carelessly or willfully destroyed or disturbed by the Contractor, the cost of replacing them (\$100.00 per hour) will be charged against him and will be deducted from the payment for the work. See additional requirements for Construction Stakes, Lines and Grades under the "Traffic Control" Special Provision.

12. MAINTENANCE OF THE PROJECT

Maintenance of the Project shall be in accordance with [Section 104-10](#) of the NCDOT Standard Specifications.

The Contractor shall furnish and erect, at no additional cost to the City, whatever sidewalks, bridges, culverts, or other works as may be necessary for the protection of the public, including, but not limited to, barricades, fences, etc. and for the safe and proper execution of other public utility lines so as not to interfere therewith or damage or cause damage thereto. The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault, omission, or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all work performed hereunder until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the City.

13. STORAGE OF MATERIALS AND EQUIPMENT

The Contractor shall be responsible for locating and providing storage areas for construction materials and equipment. The material and equipment storage shall comply with all local and state ordinances throughout the construction period. The Contractor shall restore the storage area to its original condition upon completion of the Project or upon such time as directed by the Engineer. Such restoration shall be at no additional cost to the City.

The Contractor shall be responsible for the safeguarding of materials and equipment against fire, theft and vandalism and shall not hold the City responsible in any way for the occurrences of same. The Contractor shall furnish and erect, at no additional cost, whatever works may be necessary for the protection of the public, including but not limited to barricades, fences, etc. Prior to final payment being made, the Contractor shall obtain a release from the property owner of the storage area utilized for the Project.

14. SUBLETTING

The Engineer reserves the right to waive the subcontracting limits set forth in [Section 108-6](#) of the NCDOT Standard Specifications whenever it is deemed to be in the best interest of the City. The limits can be waived only upon written approval from the Engineer.

15. QUANTITY TICKETS

All quantity tickets for items not measurable in place shall be submitted in duplicate to the Project Inspector within seventy-two (72) hours after receipt of the material on the job. Each ticket shall indicate the date, contractor, job location and name, type of material, quantity of material, truck number and signature of the Contractor or his authorized representative.

No tickets will be accepted after seventy-two (72) hours have elapsed between the time of delivery and the submittal of tickets to the Project Inspector.

16. PERIODIC PAYMENTS

Reserved.

17. FINAL PAYMENT

Final Payment will be made in accordance with Section 109-9 and 109-10 of the NCDOT Standard Specifications.

The Contractor shall provide the following documents with the final pay request:

1. Contractor's Affidavit Release and Waive of Claim (form provided by the City);
2. Payment Affidavit (CBI Form 6 provided by the City);
3. State/County Sales/Use Tax Statement (form provided by the City); and
4. Consent of Surety to Final Payment (AIA Document G707).

No final payment will be authorized until these documents have been properly completed and submitted by the Contractor.

18. PAYMENT AFFIDAVITS

To determine whether disparities exist in City contracting based on race, gender or other factors, and also to measure the effectiveness of the City's Charlotte Business INCLUSION Program, the City tracks the utilization of subcontractors and suppliers on certain City contracts based on race, gender, small business status, and other factors. For analysis purpose, it is important that the City obtain this data not only for minority, female and small business suppliers and subcontractors, but also for other subcontractors and suppliers. As a condition to receiving payment under this Contract, the Contractor agrees to provide to the City with each invoice for payment submitted under this Contract, a written payment affidavit detailing the amounts paid by the Contractor to first tier subcontractors and suppliers in connection with this Contract ("Payment Affidavits"). Payment Affidavits shall be in the format specified by the City from time to time, and shall include all payments made to subcontractors and suppliers under this Contract that are not included on a prior Payment Affidavit.

Failure to provide a properly completed version of each Payment Affidavit required by this Section shall constitute a default under this Contract, and shall entitle the City to: (a) withhold payment of any amounts due the Contractor (whether under this Contract or otherwise), or (b) exercise any other remedies legally available for breach of this Contract, or (c) impose any other sanctions permitted under the City's Charlotte Business INCLUSION Program. In order to have a properly completed Payment Affidavit, each prime contractor and first tier subcontractor identified must be registered in the City's Vendor Registration System. The City may request on a case-by-case basis that the Contractor require certain suppliers to be registered in the City's Vendor Registration System, and may withhold payment of any amounts due the Contractor in the event the Contractor fails to comply with such request.

19. SALES AND USE TAX

The City is NOT exempt from applicable sales or use taxes assessed by North Carolina or other states. However, the North Carolina Department of Revenue does reimburse the City for the North Carolina sales or use taxes the City pays for certain construction related goods. Therefore, the City utilizes the below procedures for such sales tax. The Contractor agrees to follow the procedures set forth below for all sales or use taxes related to the Work and any other work performed pursuant to this contract.

"Eligible Taxes" are defined as North Carolina sales or use taxes paid by the Contractor for *buildings, materials, supplies, fixtures and equipment that become a part of or annexed to any building or structure that is owned or leased by the City and is being erected, altered or repaired by the City* (North Carolina GS 105-164-14(c)).

“Non-Eligible Taxes” are defined as all other sales or use taxes including those paid to states other than North Carolina, or sales or use taxes paid to North Carolina on purchases or rental of tools, equipment, and disposable supplies, including fuel, used in the Work.

Non-Eligible Taxes

Non-Eligible Taxes shall be included in the Bid and will be included in the Contract Amount.

The Contract Amount as shown in Section 00 50 00 includes full and complete compensation for the Contractor for any and all Non-Eligible Taxes paid by the Contractor in the prosecution of the Work and any other work performed pursuant to this Contract.

Eligible Taxes

Eligible Taxes **shall not** be included in the Bid and will **not** be included in the Contract Amount. Eligible Taxes will be reimbursed separately pursuant to the procedures below.

Prior to award of the Contract, the Contractor shall provide the City with the estimated amount of total Eligible Taxes for the Contract. This estimated amount of total Eligible Taxes will be used solely for the purpose of the City’s budget planning for the Project and will **not** be included in the Contract Amount.

The Contract Amount as shown in Section 00 50 00 excludes Eligible Taxes. The Contractor shall invoice the City for Eligible Taxes as set forth below and the City will reimburse the Contractor for those Eligible Taxes pursuant to the procedures below.

In the event the Contractor fails to materially follow the procedures set forth by this Article, and/or fails to properly document its payment of Eligible Taxes, the City will not be liable to the Contractor in any way for the payment of such Eligible Taxes.

In order to receive the reimbursement for Eligible Taxes, the Contractor shall provide a detailed listing of Eligible Taxes on the Sales/Use Tax Statement (“Tax Statement”) provided in the Contract Documents. Tax Statements must be submitted with each payment request and shall include invoices documenting the Eligible Taxes and the underlying purchases made by the Contractor or by the Contractor’s subcontractor.

Tax Statements must indicate whether such Eligible Taxes was paid by the Contractor or by the Contractor’s subcontractor.

If no Eligible Taxes have been paid for the period in which a payment request is being submitted by the Contractor, then the Contractor shall indicate “No Eligible Taxes paid this period” and submit the Tax Statement accordingly.

Tax Statements must be completed and signed by the Contractor/subcontractor’s company officer submitting the statement and certified by a Notary Public.

Tax Statement must list in detail the Eligible Taxes paid for each individual invoice paid by the Contractor/subcontractor. No lump sum, running total, or copies of previously reported statements will be accepted.

Tax Statements must show separately the portion of Eligible Taxes that are paid to the State of North Carolina and the applicable North Carolina county, identifying the county accordingly.

Tax Statements will be reviewed and approved by the City prior to paying the Eligible Taxes reimbursement. Such approval will not be unreasonably withheld.

20. ALLOWANCES

Any Allowance included as a line item on the Itemized Bid, including but not limited to Contingency Allowances, may only be used by the Contractor upon written instructions from the Engineer. Any portion of any Allowance remaining

at the end of the Contract shall revert to the City. The City reserves the right to change any Allowance amount prior to award of the Contract.

21. COMMERCIAL NON-DISCRIMINATION POLICY

REQUIRED BY CITY ORDINANCE: Contractor agrees to comply with the Non-Discrimination Policy set forth in Chapter 2, Article V of the Charlotte City Code, which is available for review at <http://library.municode.com/index.aspx?clientId=19970> and incorporated herein by reference. Contractor consents to be bound by the award of any arbitration conducted thereunder .

22. E-VERIFY

Contractor shall comply with the E-Verify requirements of Article 2 of Chapter 64 of the North Carolina General Statutes and shall require each of his subcontractors to do so as well.

23. IRAN / ISRAEL

NC prohibition on contracts with companies that invest in Iran or boycott Israel. Company certifies that: (i) it is not identified on the Final Divestment List or any other list of prohibited investments created by the NC State Treasurer pursuant to N.C.G.S. 147-86.58 (collectively, the "Treasurer's IDA List"); (ii) it has not been designated by the NC State Treasurer pursuant to N.C.G.S. 147-86.81 as a company engaged in the boycott of Israel (such designation being referred to as the "Treasurer's IB List"); and (iii) it will not take any action causing it to appear on the Treasurer's IDA List or the Treasurer's IB List during the term of this Contract. In signing this Contract Company further agrees, as an independent obligation, separate and apart from this Contract, to reimburse the City for any and all damages, costs and attorneys' fees incurred by the City in connection with any claim that this Contract or any part thereof is void due to Company appearing on the Treasurer's IDA List or the Treasurer's IB List at any time before or during the term of this Contract.

24. INDEMNIFICATION

To the fullest extent permitted by law, the Company shall indemnify, defend, and hold harmless each of the "Indemnitees" (as defined below) from and against any and all "Charges" (as defined below) proximately caused by the Company's breach of contract, or negligent, reckless or intentional acts or omissions constituting a tort under applicable statutes or common law, or violations of applicable statutes or regulations, unless the Charges are proximately caused by or resulting from, in whole or in part, the negligence of an Indemnitee. For Purposes of this Section, (a) the term "Indemnitees" shall mean the City and each of the City's officers, officials, employees, agents and independent contractors (excluding the Company) and (b) the term "Charges" shall mean claims, losses, damages, fines, penalties, royalties, obligations, liabilities, and expenses, including but not limited to reasonable attorneys' fees.

In any case in which the Company provides a defense to the City or other Indemnitee pursuant to this indemnity, the defense will be provided by attorneys reasonably acceptable to the City. The provisions of this Contract regarding indemnity will survive the expiration or termination of this Contract.

If this Contract is funded in full or in part by federal funds, the indemnity rights granted to the City in this Contract shall also extend to the U.S. Government agency that extends such funding, and to the agency's officers, officials, employees, agents, and independent contractors (excluding the Company).

25. GUARANTEE

The Contractor shall guarantee all materials and workmanship for a period of one (1) year from the date of acceptance by the City and shall replace any portions that fail because of faulty materials or workmanship at no additional cost to the City. A six (6) month and eleven (11) month inspection will be held during the warranty period.

The Contractor shall immediately repair all defective items upon notification. Items repaired under the provisions shall have an extended warranty period of twelve (12) months from the date of repair of the item.

Areas and/or other work disturbed while accessing and/or repairing/replacing warranty covered items shall be stabilized and repaired at no additional cost to the City.

26. INSURANCE REQUIREMENTS

Contractor's Liability and Other Insurance: The Contractor shall purchase and maintain with a company acceptable to the City and authorized to do business in the State of North Carolina, such insurance as will protect him from claims under workers' compensation laws, disability benefit laws or other similar employee benefit laws; from claims of damages because of bodily injury, occupational sickness or disease, or death of his employees; from claims for damages because of bodily injury and personal injury; and from claims for damage and destruction of tangible property, including loss of use resulting there-from – any or all of which may arise out of or result from the Contractor's operations under the Contract Documents, whether such operations be by himself or any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable.

The insurance shall be written for not less than the limits of liability specified below.

Automobile: Bodily injury and property liability covering all owned, non-owned and hired automobiles for limits of not less than \$1,000,000.00 bodily injury each person, each accident and \$1,000,000.00 property damage, or \$1,000,000.00 combined single limit – bodily injury and property damage combined.

Commercial General Liability: Bodily injury and property damage liability as shall protect the Contractor and any subcontractor performing work under this Contract from claims of bodily injury or property damage which arise from operations of this Contracts, whether such operations are performed by the Contractor, any subcontractor, or anyone directly or indirectly employed by either. The amounts of such insurance shall not be less than \$1,000,000.00 bodily injury each occurrence/aggregate and \$1,000,000.00 property damage each occurrence/aggregate or \$1,000,000.00 bodily injury and property damage combined single limits each occurrence/aggregate. This insurance shall include coverage for products/completed operations, personal injury liability and contractual liability assumed under the indemnity provision of this Contract and broad form property damage, explosion, collapse and underground property damage (XC&U). The coverage shall be on an occurrence basis.

Workers' Compensation and Employers' Liability: Shall meet the statutory requirement of the State of North Carolina, in an amount of \$100,000.00 each accident and disease – each employee and \$500,000.00 disease policy limit providing coverage for employees and owners.

The City shall be named as an additional insured under the commercial liability insurance for operations or services rendered under this Contract.

At the time of execution of the Contract, the Contractor shall provide the City with insurance certificates certifying that the foregoing insurance is in force; and such insurance certificates shall include provisions that the insurance shall not be cancelled, allowed to expire, or be materially changed without giving the City thirty (30) days advance written notice by mail.

The insurance certificate **must** include the following language in the "Description of Operations/Locations/Vehicles" box of the insurance form next to the project name: **"City of Charlotte is listed as an additional insured on the general liability policy."** Failure to provide this specific language will delay the execution of this contract.

The Contractor is advised that if any part of the work under this Contract is sublet, he shall require the subcontractor(s) to carry insurance as required above. However, this will in no way relieve the Contractor from providing full insurance coverage on all phases of the Project, including any that are sublet.

When certain work is performed inside rights-of-way owned by railroads, North Carolina Department of Transportation or other agencies, both the Contractor and any subcontractors may be required to furnish individual insurance certificates made in favor by the controlling agency, with limits established by that agency.

27. HOLIDAY WORK RESTRICTIONS

No work shall be performed on the Project which is subject to measurement or payment when City offices are closed for observed City holidays. This restriction does not relieve the Contractor from the responsibility of ensuring the safety and well-being of pedestrian and vehicular traffic, and for the protection of public and private property.

In emergencies and certain other conditions deemed necessary by the Engineer, the Contractor may be directed to work on weekends or holidays. There will be no separate measurement or payment for work done under these directives other than those established in the Contract.

28. DRAINAGE STRUCTURES

The Contractor shall build inverts in all drainage structures in accordance with City Standards. There will be no separate measurement or payment for this work.

29. TERMINATION

TERMINATION BY THE CITY FOR CAUSE

1. The City may terminate the Contract if the Contractor:
 - a. Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
 - b. Fails to make payment to subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the subcontractors;
 - c. Persistently disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction; or
 - d. Otherwise is guilty of substantial breach of a provision of the Contract Documents.
2. When any of the above reasons exist, the City, upon certification by the Engineer that sufficient cause exists to justify such action, may without prejudice to any other rights or remedies of the City and after giving the Contractor and the Contractor's surety, if any, seven days written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:
 - a. Take possession of the site and all materials, equipment, tools and construction equipment and machinery thereon owned by the Contractor;
 - b. Accept assignment of subcontracts; and
 - c. Finish the work by whatever reasonable method the City may deem expedient. Upon request of the Contractor, the City shall furnish the Contractor a detailed accounting of the costs incurred by the Owner in finishing the work.
3. When the City terminates the Contract for one of the reasons stated above, the Contractor shall not be entitled to receive further payment until the work is finished.

The City Engineer shall have authority to terminate the Contract without additional authorization by City Council.

4. If the unpaid balance of the Contract Sum exceeds the costs of finishing the work, including compensation for the Engineer's services and expenses made necessary thereby, and other damages incurred by the City and not expressly waived, such expenses shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the City. The amount paid to the Contractor

or the City, as the case may be, shall be certified by the Engineer, upon application, and this obligation for payment shall survive the termination of the Contract.

TERMINATION BY THE CITY FOR CONVENIENCE

1. The City may, at any time, terminate the Contract for the City's convenience and without cause. Upon written notice from the City of such termination for the City's convenience, the Contractor shall:
 - a. Cease operations as directed by the City in the notice;
 - b. Take actions necessary, or that the City may direct, for the protection and preservation of the work; and
 - c. Except for the work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
2. The City Engineer shall have authority to terminate the Contract without additional authorization by City Council.
3. In case of such termination for the City's convenience, the Contractor shall be entitled to receive payment for work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit for the completed work.

30. DISPUTE RESOLUTION

It is understood and agreed that projects subject to NCGS 143-128(g) requires that disputes arising under a Contract subject to a dispute resolution process specified by the Owner (i.e., the City). In compliance with this statutory provision, the City specifies this Article as the dispute resolution process to be used on this Project, regardless if the Project is or is not subject to NCGS 143-128(g). It is further understood and agreed that this dispute resolution process is based on non-binding mediation and will only be effective to the extent that the Parties to any mediated dispute participate in the mediation in good faith. It is also understood and agreed that the City is under no obligation under any circumstance to secure or enforce the participation of any other Party in the mediation of any dispute subject to this Article and NCGS 143-128(g).

- A. Any dispute arising between or among the Parties listed in Section C of this Article that arises from an agreement to perform services in conjunction with the Project, including without limitation a breach of such agreement, shall be subject to non-binding mediation administered by the American Arbitration Association under the industry appropriate Mediation Rules ("Rules"). To the extent any provision of the Rules is inconsistent with the provisions of this Article, the provisions of this Article shall control. The mediation provided in this Article shall be used pursuant to this Contract and NCGS 143-128(g) and is in lieu of any dispute resolution process adopted by any other government entity, which process shall not apply to this Project.
- B. For purposes of this Article the following definitions shall apply:
 - i) Party or Parties refers to the parties listed in Section C of this Article.
 - ii) Project means project pursuant to this Contract.
- C. The City and any Party contracting with the City or with any first-tier or lower-tier subcontractor for the performance of the Project agree to participate in good faith in any mediation of a dispute subject to this Article and NCGS 143-128(g), including without limitation the following Parties (if any): Contractor, independent contractor(s) of the City, surety(ies), subcontractor(s), and supplier(s).
- D. The Contractor and all other Parties shall include this Article in every agreement to which it (any of them) is a Party in performing the Services of the Project without variation or exception. Failure to do so will constitute a breach of this Contract, and the Contractor or other Party failing to include this Article in any agreement required by this Article shall indemnify and hold harmless the remaining Parties from and against any and all claims, including without limitation reasonable attorney fees and other costs of litigation, arising in any manner from such breach. Notwithstanding the foregoing provisions of this Section, it is

- expressly understood and agreed that the Parties are intended to be and shall be third-party beneficiaries of the provisions of this Article and can enforce the provisions hereof.
- E. The following disputes are not subject to mediation: (i) a dispute seeking a non-monetary recovery; and (ii) a dispute seeking a monetary recovery of \$15,000 or less.
 - F. A dispute seeking the extension of any time limit set forth in an agreement to perform the Services for the Project shall be subject to mediation pursuant to this Article and NCGS 143-128(g), but only if the damages which would be suffered by the Party seeking the extension would exceed \$15,000 if the disputed extension is denied. To the extent that liquidated damages are set forth in such agreement as the measurement of damages for failure by such Party to meet such time limit, such liquidated damages shall be the exclusive standard for determining the amount of damages associated with such dispute.
 - G. For purposes of this Article, a dispute is limited to the recovery of monetary damages from the same transaction or occurrence against a single Party or two or more Parties alleged to be liable jointly, severally or in the alternative. Two or more disputes may not be consolidated or otherwise combined without the consent of all Parties to such disputes.
 - H. In addition to such matters as are required by the Rules, a request for mediation shall include the amount of the monetary relief requested.
 - I. Prior to requesting mediation, a Party must form a good faith belief that it is entitled under applicable law to recover the monetary amount to be included in the request from one or more of the remaining Parties. Such belief must be based on a reasonable and prudent investigation into the dispute that is the subject of the request. The request for mediation must be based on such investigation and may not include any amount or the name of any remaining Party, unless supported by such investigation and good faith belief by the Party requesting the mediation.
 - J. If a Party breaches any provision of Section I of this Article, it shall indemnify and hold harmless all other Parties from any costs, including reasonable attorney fees and other costs of litigation, and damages incurred by such other Parties that arise from such breach.
 - K. All expenses incurred by a Party to a dispute in preparing and presenting any claim or defense at the mediation shall be paid by the Party. Such expenses include without limitation preparation and production of witnesses and exhibits and attorney fees. All other expenses of the mediation, including filing fees and required traveling and other expenses of the mediator, shall be borne as follows: one half by the Party requesting the mediation, with the remaining parties paying equal shares of the remaining expenses and costs; provided that, if the City is named as a party to the mediation, the City shall pay at least one-third of the mediation expenses and costs divided among the Parties. If more than one Party to a dispute requests a mediation, the mediation expenses and costs to be divided among the Parties shall be borne equally by the Parties to the dispute; provided that, if the City is named as a Party to the mediation, the City shall pay at least one-third of the mediation expenses and costs divided among the Parties.
 - L. The mediation shall be held at a location agreeable to the mediator and all of the Parties; provided that, if no agreement can be reached, the mediation will be held at such location in Mecklenburg County as the mediator shall determine.
 - M. The provisions of this Article are subject to any other provision of this Contract concerning the submission, documentation and/or proof of any claim or dispute. Such other provisions shall apply in full force and shall be satisfied as a condition precedent to mediation pursuant to this Article.
 - N. The Parties understand and agree that mediation in accordance with this Article shall be a condition precedent to institution of any legal or equitable proceeding seeking monetary recovery based on any dispute that is subject to mediation pursuant to this Article.

32. SURFACE WATER QUALITY PROTECTION

401/404 Clean Water Act permit requirements for impacts to wetlands and streams are covered by Charlotte Storm Water Services Regional General Permit #163/ GC#4147 or applicable permit document. As such, the proposed construction activity will not violate applicable portions of the permitting document as long as the permitting document requirements are met. The referenced permits can be found at:

<http://saw-reg.usace.army.mil/RGP/RGP163-2017-04-24.pdf>; and

<https://edocs.deq.nc.gov/WaterResources/DocView.aspx?dbid=0&id=613077&page=1&cr=1>

All projects must comply with local, state and federal laws including the City of Charlotte's Storm Water Pollution Control Ordinance which prohibits the discharge of non-stormwater, either directly or indirectly, to the stormwater system or waters of the State. Non-stormwater includes, but is not limited to, sediment, concrete, trash, and fuel.

Concrete Wash Water: The Contractor shall properly contain, collect, and dispose of concrete materials and concrete wash water so that it does not enter the street, stormwater drainage system, or water bodies. This may include the creation and maintenance of a concrete washout area on-site and/or use of a portable washout container to haul material off site.

Spill Response: The Contractor shall have spill response materials and an employee who is knowledgeable about using them for to respond to and clean up spills of oil and gas on-site at all times. Spills include any amount of oil or fuel coming off trucks or equipment. They may include, but are not limited to, those that occur during refueling, from equipment or vehicles, or from containers on site. Proper spill response is required for spills that occur on soil or the road. Spill response materials shall include clay absorbent material, spill response pads and booms, shovels and brooms. Spill cleanup materials are subject to inspection by the City and/or their representative(s) at any time. If a spill/leak occurs, all work must be suspended until the spill/leak is contained and cleaned up and/or the truck/equipment is towed off site. If the spill/leak is more than one gallon and/or enters a storm drain or water body, the contractor must notify the City's Construction Inspector within one (1) hour of spill/leak discovery. Spill/leak containment, towing, and cleanup and shall be completed within 24 hours of the occurrence at no additional cost to the City.

Washing Streets: The Contractor shall properly collect and dispose of stormwater pollutants generated during the project, from streets within the project area, to the maximum extent practicable, before washing the streets with potable water. This may include, but is not limited to, hand sweeping, shoveling, vacuuming, and mechanized street sweeping or scrubbing. These best management practices shall be performed at no additional cost to the City and are intended to collect materials for proper disposal rather than wash them into the storm drainage system or waters of the state. They do not replace the need for preventing pollutants from entering the street, but rather, are intended to supplement them.

Fueling Operations: The Contractor shall make its own determination of on-site fuel storage needs. If on-site fuel storage is utilized, the Contractor shall submit a Refueling Operations Plan (The Plan) ten (10) days prior to the start of any project work. The Plan shall include procedures for fuel handling, spill/leak containment, disposal of fuel/leak contaminated material, the location of a fuel tank(s) a minimum of 50' from any storm drain or water body, and a written agreement with the land owner to store fuel on the property. The Plan shall also list emergency contacts and cell phone numbers including the on-site construction supervisor and the designated contractor representative who is responsible for overseeing implementation of The Plan. If a mobile fueling unit is utilized, all storm drains that have the potential to receive a fuel spill during refueling must be protected.

33. CONTRACTOR QUALITY CONTROL

The Contractor shall establish, provide, and maintain an effective quality control program that details the methods and procedures to be taken to assure that all materials and completed construction work required for the Project conform to the Contract Documents.

Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the construction documents, the Contractor is fully responsible for developing and executing their own quality control program. The Contractor shall provide the City with written documentation of the quality control methods and procedures for review and acceptance prior to the start of the work.

The Contractor shall perform inspection, testing, and measurement of all items of work required by the plans and technical specifications, including those performed by subcontractors.

Review and/or testing of the materials and completed work by the City and/or their representative(s) does not relieve the Contractor of the performing quality control inspections/review of the Contractor's work and/or subcontractor's work. The City may elect to require the Contractor to repair or replace sections of the project that has not been installed in accordance with the Quality Control program.

In the cases where the quality control activities do not comply with the Contractor's Quality Control program or the Construction Documents, the City and/or their representative(s) may suspend all work. The suspension of work shall not alter the Project Construction Schedule and/or associated liquidated damages.

All required quality control activities shall be considered incidental to the project work. There will be no separate measurement and/or payment for this work.

34. PROHIBITION OF USE OF HIGH PAH PAVEMENT PRODUCTS

No Person shall use, or permit to be used, a high PAH pavement product within the City. For the purposes of this subsection, the term "high PAH pavement product" means a product, material or substance that contains greater than 0.1% (1000 ppm) polycyclic aromatic hydrocarbons (PAH) by weight, and, is intended for use on an asphalt or concrete surface, including but not limited to, a driveway, playground, parking area, sidewalk, pathway, or roadway. High PAH pavement product may contain coal tar, coal tar pitch volatiles, RT-12, refined tar, steam-cracked petroleum residues, heavy pyrolysis oil, steam-cracked asphalt, pyrolysis fuel oil, heavy fuel oil, ethylene tar, ethylene cracker residue, or a variation of those substances assigned the chemical abstracts service (CAS) numbers 65996-92-1, 65996-93-2, 65996-89-6, 8007-45-2, 64742-90-1, or 69013-21-4.

35. BILLING RECORDS

During the term of this Contract and for three (3) years after it terminates, Contractor will keep documentation sufficient to verify the amounts billed to the City. The City has the right to audit Contractor's time cards, invoices, reports and other documents relating to amounts charged under this Contract, and will not be required to pay for: (a) any time billed that was excessive in light of the result achieved, or (b) any Services that did not meet the standards and requirements referenced in this Contract. Contractor agrees to make such documents available for inspection and copying by the City in Charlotte, North Carolina between the hours of 9:00 a.m. to 5:00 p.m. Monday through Friday, within ten (10) days after the City requests them. The City shall pay its own expenses relating to such audits, but shall not have to pay any expenses or additional costs of the Company. However, if non-compliance is found that would have cost the City in excess of \$10,000 but for the audit, then the Company shall be required to reimburse the City for the cost of the audit.

36. Audit

The Contractor shall keep full and detailed records and accounts related to the cost of the Work and exercise such controls as may be necessary for proper financial management under this Agreement and to substantiate all costs incurred. The accounting and control systems shall be satisfactory to the City. The City and the City's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, the Contractor's records and accounts, including complete documentation supporting accounting entries, books, correspondence, instructions, drawings, receipts, subcontracts, subcontractor's proposals, purchase orders, vouchers, memoranda and other data relating to this Agreement. The Contractor shall preserve these records for a period of three years after final payment or contract termination, or for such longer period as may be required by law. The City shall have the right to audit, either itself or through an independent auditor, all books, records and facilities of the Contractor, related to the project, necessary to evaluate Contractor's compliance with the terms and conditions of the Agreement or the City's payment obligations. The City shall pay its own expenses, relating to such audits, but shall not have to pay any expenses or additional costs of the Contractor. However, if non-compliance is found that would have cost the City in excess of \$10,000 but for the audit, then the Contractor shall be required to reimburse the City for the cost of the audit.

37. Governing Law and Venue

North Carolina law will govern all matters relating to this Contract (without regard to North Carolina conflicts of law principles). Any legal actions or proceedings relating to this Contract shall be brought in a state or federal court sitting in Mecklenburg County, North Carolina, other than actions to enforce a judgment.



CHARLOTTE BUSINESS INCLUSION (CBI) PROGRAM

The City of Charlotte has a long history of creating and implementing strategies to support and encourage local business growth. The Charlotte City Council has adopted the Charlotte Business INCLUSION Policy to promote diversity, inclusion, and local business opportunities in the City’s contracting and procurement process for Minority-Owned Business Enterprises, Women-Owned Business Enterprises, and Small Business Enterprises (MWSBEs) located in the CSA, Charlotte Combined Statistical Area*.

A complete list of City of Charlotte certified Small Business Enterprises (SBEs) and City of Charlotte registered Minority-Owned Business Enterprises (MBEs) and Women-Owned Business Enterprises (WBEs) (SBE, MBE, and WBE, collectively MWSBE) is available on the City’s website at www.charlottebusinessinclusion.com

PROJECT SUBCONTRACTING

GOAL:

MBE Goal: 7.00%

SBE Goal: 18.00%

* The Charlotte CSA consists of the following 13 counties:

In NC: Anson, Cabarrus, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, and Union

In SC: Chester, Lancaster, and York

MBE, WBE, and SBE references throughout this document and CBIForms 1-6 may refer to Subcontracting Goal. The information in the Subcontracting Goal box above will supersede any general references in this document.

¹The MBE Goal established for this project can only be met with City of Charlotte registered MBEs that have been certified as a **Historically Underutilized Business** by the State of North Carolina who have an ethnic designation of:

- African American
- Hispanic
- Native American

²The WBE Goal established for this project can only be met with City of Charlotte registered WBEs that have been certified as a **Historically Underutilized Business** by the State of North Carolina.

³SBE Goal established for this project can only be met with City of Charlotte Certified SBEs.

1. APPLICATION:

The City's Charlotte Business INclusion (CBI) Policy is incorporated into and made a part of this solicitation and the resulting contract (the "Contract"). Copies of the CBI Policy may be obtained by:

Internet: www.charlottebusinessinclusion.com

Mail: Charlotte Business INclusion Office
600 East Fourth Street, 9th Floor
Charlotte, North Carolina 28202

Capitalized terms used in this document shall have the meanings set forth in Part A, Appendix 1 of the CBI Policy. Each reference to "you" or "your" in these provisions refers to any entity that submits a bid, proposal or statement of qualifications on a City contract, and any entity that enters into a contract with the City.

For this solicitation, the CBI Policy requires that you either (a) meet the established Subcontracting Goal, as listed on the first page of this document; or (b) comply with the Good Faith Efforts and Good Faith Negotiation requirements referenced in Section 3 below. Failure to comply with the CBI Policy in the bid phase constitutes grounds for rejection of your Bid. Failure to comply after the contract award may result in the assessment of damages and/or termination of your contract.

2. SUBCONTRACTING GOALS:

You must submit your proposed MBE, WBE, or SBE utilization for this Contract on CBI Form 3 (Subcontractor/Supplier Utilization Commitment Form) listing all subcontractors and suppliers that will be providing goods or services.

MBE or WBE established Goals can only be met with the City of Charlotte registered MBEs and WBEs that have been certified as a Historically Underutilized Business by the State of North Carolina.

SBE established Goals for this project can only be met with City of Charlotte certified SBEs.

CBI Form 3 MUST be submitted within twenty-four (24) hours after bid submittal. Failure to submit CBI Form 3 within twenty-four (24) hours of bid submittal shall constitute grounds for rejecting the Bid. All bidders must submit their proposed goal commitment at the time of Bid.

Bidders must state the projected dollar amount for each MBE, WBE or SBE firm listed on their CBI Form 3 and indicate the total dollar value of participation for the contract. In the event the bidder has no MWSBE participation, the bidder is still required to indicate this on CBI Form 3 by entering the word or number zero. Blank forms will be deemed to represent zero participation.

The City will only give Bidders credit towards the established Subcontracting Goal that:

- a. Is listed on CBI Form 3 submitted within twenty-four (24) hours of bid submittal; and
- b. Is listed on CBI Form 3A (when applicable); and
- c. Is documented by CBI Form 4 (CBI Letter of Intent) which is submitted to the City within three (3) Business Days after the City requests it; and
- d. Meets all of the requirements of Part B Section 3 of the CBI Policy.

NOTE: MWSBEs listed on CBI Form 3 must be actively certified/registered with the City of Charlotte as of bid date and must be performing a Commercially Useful Function as defined in Part A of the CBI Policy.

Bids submitted that do not have the above required MWSBE information indicated on CBI Form 3 constitutes grounds for the Bid to be considered non-responsive and rejected.

The established Subcontracting Goal will represent the total dollars to be spent with MBEs, WBEs, or SBEs as a portion of the total bid amount, which includes Contingency and excludes Allowances. The MBE, WBE, or SBE percentage will be rounded to two decimal places. As an example, if the MBE percentage is 3.571, it should be listed

as 3.57%, or if it is 3.578, it should be listed as 3.58%. The percentage will not be rounded to the next “whole” number, i.e., 4%. A Bidder may round up if the third number after the decimal is a five (5) or greater.

In the event Alternates are selected by the City, the established Subcontracting Goal for this Contract will apply to the total contract amount, including Contingency, selected Alternates, and excluding Allowances (“Total Contract Amount”). If a low Bidder would meet the established Subcontracting Goal on the base bid amount, but would not meet the established Subcontracting Goal for the Alternates selected by the City, the Bidder will have three (3) days after the City notifies it of its low bid status to secure enough additional participation to meet the established Subcontracting Goal calculated on the Total Contract Amount. The low Bidder will be required to utilize CBI Form 3A to meet this requirement. This in no way exempts the bidder from the CBI requirements due at bid time.

If the Bidder fails to meet the established Subcontracting Goal, calculated on the Total Contract Amount, then the Bidder must earn the Minimum Good Faith Effort (GFE) Points and meet the Good Faith Negotiation requirements set forth in Part B, Sections 4 and 5 of the CBI Policy. GFE Points will be calculated, independently, for each Subcontracting Goal that is not met. For instance, if the Bidder fails to meet the MBE, WBE, or SBE Goal that was set, the bidder will have to earn the minimum GFE points for MBEs, WBEs, or SBEs.

If the Bidder fails to meet the MBE, WBE, or SBE Goal on the Total Contract Amount and fails to earn the required Good Faith Efforts points, the Bid will be rejected.

The City will request CBI Form 4 Letters of Intent if you are a finalist for contract award. You must submit a separate CBI Form 4 for each MWSBE subcontractor/supplier identified on CBI Form 3 (and CBI Form 3A, if applicable) within three (3) Business Days after the City requests it.

3. GOOD FAITH EFFORTS and GOOD FAITH NEGOTIATION:

If two subcontracting goals are established for this Contract, then the Bidder must meet each goal. For example if a MBE goal and WBE goal are established, Bidder must meet the MBE goal and WBE goal. If you do not meet each established subcontracting goal, then you must earn the minimum good faith effort (GFE) points and meet the good faith negotiation requirements as set forth in Part B, Sections 4 and 5 of the CBI policy for the subcontracting goal that was not met.

Detailed information of the City’s Good Faith Efforts and Good Faith Negotiation requirements can be found in the CBI Policy, Part B, Sections 4 and 5. Failure to meet the Good Faith Efforts and Good Faith Negotiation requirements will constitute grounds for rejection of your Bid.

Documenting Good Faith Efforts. To demonstrate Good Faith Efforts (GFE) compliance, Bidders must complete and submit CBI Form 5: Good Faith Effort (GFE) and Statement of GFE Compliance. A minimum of fifty (50) GFE Points must be earned for each Subcontracting Goal not met. If more than one Subcontracting Goal is not met, then Bidders will be required to complete and submit a separate form for each unmet Subcontracting Goal.

CBI Form 5 lists GFEs and the number of points attainable for each type of Good Faith Effort. The City will request your Good Faith Effort (GFE) / Statement of GFE Compliance if you are an apparent low Bidder for contract award. You must submit CBI Form 5 and all supporting documentation within three (3) Business Days after the City requests it.

In deciding whether to award GFEs, the City will assess whether the efforts employed by the Bidder are those that a prime contractor would reasonably be expected to take if actively and aggressively trying to meet the established Subcontracting Goal for the Contract. This assessment will be made on a case-by-case basis taking all available facts into account. The focus will be on the likely effectiveness of the steps taken. Mere pro forma efforts will not be sufficient.

In awarding GFEs, the City may also take into account: (1) the Bidder’s past performance in meeting Subcontracting Goals; and (2) the performance of other Bidders in meeting the established Subcontracting Goal on the Contract

up for award. For example, when the apparent low Bidder fails to meet the established Subcontracting Goal, but other Bidders meet it, the City may reasonably raise the question of whether, with additional reasonable efforts, the apparent low Bidder could have met the Subcontracting Goal.

It is important that you carefully review Part B, Sections 4 and 5 of the CBI Policy to understand and comply with all requirements. All actions necessary to earn the required GFE Points must be undertaken prior to Bid submittal. Failure to comply with the requirements set forth in this section shall constitute grounds for rejecting a bid.

3.1 MWSBE Contacts

To receive credit for GFE 5.3.1, MWSBE Contacts, at least ten (10) Days prior to Bid submittal, the Bidder must contact MWSBE firms in a manner reasonably calculated to meet the established Subcontracting Goal for the Contract. A MWSBE Vendor List can be located at www.charlottebusinessinclusion.com.

Please refer to Part B, Section 5.3.1 of the CBI Policy regarding how these Contacts must be made and documented. Contacts are to be recorded on CBI Form 2: CBI Solicitation Form, which is submitted along with CBI Form 5, within three (3) Business Days after requested by the City.

3.2 Good Faith Negotiation

Bidders must negotiate in good faith with all interested MWSBE firms. Part B, Section 4 of the CBI Policy defines what negotiating in “Good Faith” means. Among other things, it means that if a MWSBE is low Bid on a contract for construction or the procurement of goods, then you must contract with that MWSBE unless it is not “Qualified” within the meaning of the CBI Policy.

3.3 MWSBE Assistance Organizations

To receive credit for GFE 5.3.4, Working with MWSBE Assistance Organization, the bidder must document that it worked with one of the following organizations, as described in Part B, Section 5.3.4 of the CBI Policy:

- Metrolina Minority Contractors Association (MMCA)
- Hispanic Contractors Association of the Carolinas (HCAC)
- United Minority Contractors of North Carolina (UMCNC)
- Carolinas Association of General Contractors (CAGC)

3.4 Self-Performance

A Bidder that intends to perform 100% of the work on a Contract with its own workforce may submit an affidavit (CBI Form 1) stating that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of work on this contract with its own current workforces. In such event the Bidder shall not be required to comply with Part B, Section 5 of the CBI Policy. However, if the Bidder is not licensed to perform each and every type of work included in the Contract, or if the City has cause to believe based on past practice or other grounds that the Bidder will not be performing all work under the Contract with its own workforce, then the City may reject the Bidder’s Bid for non-compliance with the CBI Policy.

4. PROJECT DOCUMENTS / PLANS AND SPECIFICATIONS:

Plans and Specifications may be viewed at for appointment.

Other Locations:

<p>Carolinas Associated General Contractors (CAGC) 4824 Parkway Plaza Blvd. Charlotte NC 28217 704.372.1450 Documents through: Isqft https://www.isqft.com/start 800.364.2059</p>	<p>Hispanic Contractors Association of the Carolinas (HCAC) 226 Westinghouse Blvd. Ste. 604 Charlotte NC 28273 704.583.4184 www.hcacarolinas.org</p>	<p>Dodge Data & Analytics https://upload.construction.com/dfmgr/login</p>	<p>Beatties Ford Road Vocational Trade Center, Inc. 1406 Beatties Ford Road Charlotte NC 28216 980.349.4067 http://www.beattiesfordvoccenter.com/contact.php</p>
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5. MANDATORY SUBCONTRACTING REQUIREMENTS:

Per Part B, Section 2.4 of the CBI Policy, City Council has the authority to establish mandatory subcontracting

requirements for certain Contracts. The box checked below indicates whether such requirements have been established for this Contract:

- City Council has established a mandatory subcontracting requirement of xx.xx percent (XX%) for this Contract.
 City Council has not established a mandatory subcontracting requirement for this Contract.

6. CBI POLICY PROVISIONS APPLICABLE AFTER CONTRACT AWARD:

If you are awarded a Contract with the City, note in particular the following Part D Sections of the CBI Policy regarding Post Contract Award Requirements and activity:

- I. Compliance with the committed established Subcontracting Goal throughout Contract completion (Part D, Section 2)
- II. Performance of a Commercially Useful Function and affiliate status (Part D, Section 3)
- III. Terminating or Replacing an MWSBE on the Contract (Part D, Section 5)
- IV. New Subcontractor Opportunities (Part D, Section 6)
- V. Renewals (Part D, Section 7)
- VI. Payments to MWSBEs (Part D, Section 8)
- VII. Utilization Reports and Documentation of Payments (Part D, Section 9)
- VIII. Remedies and Liquidated Damages (Part D, Section 14)

7. CBI CONTRACT PROVISIONS:

The following provisions are incorporated into any Contract that may result from this solicitation.

Charlotte Business INclusion. The City has adopted a Charlotte Business INclusion Policy (“CBI Policy”), which is posted on the City’s website and available in hard copy form upon request to the City.

The parties agree that:

- I. The terms of the CBI Policy, as revised from time-to-time, together with all rules and guidelines established, are incorporated into this Agreement by reference; and
- II. A violation of the CBI Policy shall constitute a material breach of this Agreement, and shall entitle the City to exercise any of the remedies set forth in Part D of the CBI Policy, including but not limited to liquidated damages; and
- III. Without limiting any of the other remedies the City has under the CBI Policy, the City shall be entitled to withhold periodic payments and final payment due to the Contractor under this Agreement until the City has received in a form satisfactory to the City all claim releases and other documentation required by the City’s CBI Policy, and in the event payments are withheld under this provision, the Contractor waives any right to interest that might otherwise be warranted on such withheld amount under G.S. 143-134.1; and
- IV. The remedies set forth in Part D, Section 14 of the CBI Policy shall be deemed cumulative and not exclusive and may be exercised successively or concurrently, in addition to any other available remedy; and
- V. The City will incur costs if the Contractor violates the CBI Policy, and such costs are difficult to ascertain due to their indefiniteness and uncertainty. Accordingly, the Contractor agrees to pay the City liquidated damages at the rates set forth in Part D of the CBI Policy.
- VI. The Contractor agrees to participate in any dispute resolution process specified by the City from time-to-time for the resolution of disputes arising from the CBI Policy.
- VII. Nothing in this Section shall be construed to relieve a Contractor from any obligation it may have under N.C. Gen. Stat. 143-134.1 regarding the payment of subcontractors.

Remedies for Violation of CBI Policy. A violation of the CBI Policy by a Contractor shall constitute a material breach of the Contract, and shall entitle the City or private owner to:

- I. Exercise all rights and remedies that it may have at law or at equity for violation of the CBI Policy;
- II. Terminate the Contract for default;
- III. Suspend the Contract for default;

- IV. Withhold all payments due to the Contractor under the Contract until such violation has been fully cured or the City and the Contractor have reached a mutually agreeable resolution;
- V. Assess liquidated damages as provided in Part D Section 14.2; and/or
- VI. Offset any liquidated damages and/or any amounts necessary to cure any violation of the CBI Policy from any retainage being held by the City on the Contract, or from any other amounts due to the Contractor under the Contract.

The remedies set forth herein shall be deemed cumulative and not exclusive, and may be exercised successively or concurrently, in addition to any other available remedy.

Liquidated Damages. The City and the Contractor acknowledge and agree that the City will incur damages if the Contractor violates the CBI Policy in one or more of the ways set forth below, including, but not limited to, loss of goodwill, detrimental impact on economic development and diversion of internal staff resources. The parties further acknowledge and agree that the damages the City might reasonably be anticipated to accrue as a result of such failures are difficult to ascertain due to their indefiniteness and uncertainty. Accordingly, the Contractor agrees to pay the liquidated damages assessed by the City at the rates set forth below for each specified violation of the CBI Policy. The Contractor further agrees that for each specified violation the agreed upon liquidated damages are reasonably proximate to the loss the City will incur as a result of such violation:

- I. **Failure to Meet Committed Subcontracting Goal.** If the City determines upon completion or termination of a Contract that the Contractor did not meet a Committed Subcontracting Goal and that such failure is not otherwise excused under Part D of the CBI Policy, the City may assess the lesser of: (a) \$200,000 or (b) the dollar difference between the Committed Subcontracting Goal that was missed and the Contractor's actual utilization toward that Goal. Such amount may be assessed when it becomes apparent that it will not be possible for the Contractor to achieve the Committed Subcontracting Goal.
- II. **Use of a Conduit.** If the Contractor lists a MWSBE to receive credit towards a Committed Subcontracting Goal with knowledge that the MWSBE will be acting as a Conduit or will not be performing a Commercially Useful Function reasonably commensurate with the payment amount for which the Contractor will be seeking credit, the City may assess the lesser of: (a) \$100,000 per incident; or (b) the dollar amount the Contractor indicated that it would pay such MWSBE in the MWSBE's contract (or if no contract has been signed, the MWSBE's Letter of Intent).
- III. **Wrongful Termination or Replacement of MWSBE.** If the Contractor terminates or replaces a MWSBE in violation of the CBI Policy, the City may assess the lesser of: (a) \$50,000 per incident; or (b) the dollar amount of the work remaining to be performed by the terminated MWSBE at the time it was terminated (or if the MWSBE was not terminated because it was never retained, then the dollar amount that the Contractor indicated it would pay the MWSBE in the MWSBE's Letter of Intent).
- IV. **Failure to Comply with CBI Policy Following Termination or Withdrawal of a MWSBE.** If the Contractor fails to comply with the Modified Good Faith Efforts requirements (Part D, Section 5 of the CBI Policy) in replacing a MWSBE that is terminated or withdraws from work on a project, the City may assess the lesser of: (a) \$50,000 per incident or (b) the dollar amount of the work remaining to be performed by the MWSBE that withdrew or was terminated at the time of the termination or withdrawal.
- V. **Failure to Comply with CBI Policy to Add New Subcontractors.** If the Contractor fails to comply with the Modified Good Faith Efforts requirements (Part D, Section 5 of the CBI Policy) in adding new subcontractors to a Contract, or when the scope of work of a Contract changes so as to create a new MWSBE subcontracting opportunity, the City may assess the lesser of: (a) \$50,000 per incident; or (b) the dollar amount of the new or additional work.
- VI. **False Statements and Misrepresentations.** If the Contractor makes a false statement or material misrepresentation or material misleading omission regarding any matter relevant to the CBI Policy (including but not limited to information relating to good faith efforts, MWSBE utilization, SBE certification/MWBE registration, or payments to MWSBEs), the City may assess the lesser of: (a) \$50,000 per incident; or (b) if the misrepresentation relates to payment, the dollar difference between what the Contractor represented and the truth.
- VII. **Failure to Respond to Request for Information.** If the Contractor fails to provide any report, documentation, affidavit, certification or written submission required under the CBI Policy within the time period set forth therein, the City may assess \$40 per day for each day that such report, documentation or written submission

is overdue.

VIII. **Seeking Credit for Use of An Affiliate to Meet the Committed Subcontracting Goal.** If the City finds a violation of Part D, Section 3 of the CBI Policy due to a Contractor seeking credit for utilizing a MWSBE that the City determines to be an Affiliate, the City may assess the lesser of: (a) \$75,000 per incident or (b) the dollar amount the Contractor counted towards its Committed Subcontracting Goal for that MWSBE.

8. CBI FORMS:

Bidders shall submit the following CBI forms within the timeframes indicated below:

CBI FORM	SUBMISSION REQUIREMENTS
<p>CBI Form 1: Intent to Perform Contract with <u>Own</u> Workforce Affidavit</p> <p>A Bidder that intends to perform 100% of the work on a Contract with its own workforce must submit an Affidavit (CBI Form 1) stating that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of work on this Contract with its own current workforces.</p> <p>If the Bidder is not licensed to perform each and every type of work included in the Contract, or if the City has cause to believe based on past practice or other grounds that the Bidder will not be performing all work under the Contract with its own workforce, then the City may reject the Bidder’s Bid for non-compliance with the CBI Policy.</p>	<p>If not meeting the established Subcontracting Goal, and intending to perform 100% of the work, the Bidder must submit this completed CBI Form 1 with its Bid.</p> <p>In addition to submitting a completed CBI Form 1, the Bidder must also provide at Bid submittal sufficient supporting documentation for the City to determine that the Bidder does not customarily subcontract work on this type project.</p>
<p>CBI Form 2: Solicitation Form</p> <p>Identifies all MWSBEs the Bidder contacted and any MWSBEs that contacted the Bidder.</p> <p>Documentation content includes: Scope of work, MWSBE contact, date and method of contact, response status, as well as other information.</p> <p>Note: For each scope of work bid by a MWSBE and NOT awarded to a MWSBE, Bidder must complete CBI Form 2A documenting the reason(s) for rejecting the MWSBE’s Bid.</p>	<p>If not meeting the established Subcontracting Goal, submitted as part of a Bidder’s Good Faith Efforts documentation, within three (3) Business Days after requested by the City.</p> <p>ALL supporting documentation, reflecting the solicitation methods and content, must be submitted at the same time as CBI Form 2.</p>
<p>CBI Form 2A: Good Faith Negotiation Form.</p> <p>Bidders must submit a completed CBI Form 2A for each MWSBE who bid the project and was ultimately not selected by the Bidder to participate on the Contract.</p>	<p>Must be submitted within three (3) Business Days after requested by the City.</p>
<p>CBI Form 3: Subcontractor / Supplier Utilization Commitment.</p> <p>Identifies all MWSBE, and non-MWSBE</p>	<p>DUE AT BID SUBMITTAL</p>

CBI FORM	SUBMISSION REQUIREMENTS
<p>subcontractors and suppliers to be utilized on the Contract and the dollar amounts committed to MWSBEs and non-MWSBEs.</p>	
<p>CBI Form 3A: Subcontractor/Supplier Utilization Commitment – ALTERNATES.</p> <p>Identifies additional MWSBE commitments made after Bid submittal, when there are accepted alternates.</p> <p>This form will only be accepted when the City selects alternates.</p>	<p>Must be submitted within three (3) Business Days after requested by the City.</p>
<p>CBI Form 4: Letter of Intent.</p> <p>Bidders must submit a separate Letter of Intent executed for each MWSBE listed on CBI Form 3 and CBI Form 3A (if applicable) that the Bidder commits to utilize on the Contract.</p>	<p>Must be submitted within three (3) Business Days after requested by the City.</p>
<p>CBI Form 5: Good Faith Efforts (GFE) and Statement of GFE Compliance.</p> <p>Identifies the minimum GFE points required for this contract, the GFE Categories, and respective GFE Points value for each GFE Category.</p> <p>Bidder must check each GFE Category for which it has performed the respective effort, as described in Part B Section 5.3 of the CBI Policy.</p>	<p>If not meeting the established Subcontracting Goal, CBI Form 5 must be submitted as part of the Bidder’s Good Faith Efforts documentation, within three (3) Business Days after requested by the City.</p>
<p>CBI Form 6: Payment Affidavit – Subcontractor/Supplier Utilization.</p> <p>Contractor shall provide with each pay request to the City a payment affidavit showing work that has been completed and approved for all subcontractors, suppliers, manufacturers, brokers, and/or members of a joint venture in connection with the contract.</p>	<p>Upon award of Contract, CBI Form 6 must be submitted to the City with each pay request for the duration of the project.</p> <p>For Final Payment period, check the box indicating “Final Payment.”</p>

All CBI Forms and a full list of MWSBE vendors are available on-line at www.charlottebusinessinclusion.com.

NIGP Code	Description
91244	Excavation
91345	Construction, Sewer and Storm Drain
96239	Hauling Services
98814	Erosion Control Services

CBI FORM 1: INTENT TO PERFORM CONTRACT WITH OWN WORKFORCE

Affidavit of

_____ (Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for the _____ Contract.
(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs, and has the capability to perform, and will perform all elements of the work on this project with the Bidder’s own current work forces; and

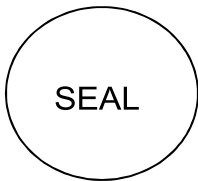
The Bidder agrees to provide any additional information or documentation requested by the City of Charlotte in support of the above statement. If additional scopes of work are added after the Bidder has been awarded the Contract, then the Bidder agrees to make a Good Faith Effort to utilize certified Minority-Owned Business Enterprises, Women-Owned Business Enterprises, Small Business Enterprises, as applicable, where possible.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: _____ Name _____ of _____ Authorized _____ Officer: _____

Signature: _____

Title: _____



State of _____ County of _____

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

Notary Public _____

CBI FORM 2: SOLICITATION FORM

Copy this Form 2 as needed to document contacts.

Per Part B, Section 5.3.1 and Part C, Section 5.1 of the CBI Policy, the Bidder must make the required contacts no less than ten (10) Days before Bid submittal to receive credit for this Good Faith Effort. All contacts must be verifiable with supporting documentation reflecting the methods and content of the solicitation. All documentation must be submitted with CBI Form 2.

A Bidder must submit CBI Form 2 within the time specified in the City Solicitation Documents. If no time period is specified in the City Solicitation Documents, the Bidder must submit CBI Form 2 within three (3) Business Days after the City requests it.

Bidder Name:					
Project Name:	Coliseum Creek Stream Repair				
Project Number:	672-10-005				
Number of Business Enterprises contacted by Bidder:	Total:	MBE:	WBE:	SBE:	
MBE/WBE/SBE Firm (Circle One):			Contact Person:		
Scope of Work:			NIGP Commodity Code:		
Initial Contact:	Date:	Method:	<input type="checkbox"/> Email	<input type="checkbox"/> Fax	<input type="checkbox"/> Courier
Follow-up:	Date:	Method:	<input type="checkbox"/> Phone	<input type="checkbox"/> In-Person	
Response:	<input type="checkbox"/> No	<input type="checkbox"/> Not bidding	<input type="checkbox"/> Is bidding \$	<input type="checkbox"/> Other (explain)	
Selected:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO (explain on CBI Form 2A)			
MBE/WBE/SBE Firm (Circle One):			Contact Person:		
Scope of Work:			NIGP Commodity Code:		
Initial Contact:	Date:	Method:	<input type="checkbox"/> Email	<input type="checkbox"/> Fax	<input type="checkbox"/> Courier
Follow-up:	Date:	Method:	<input type="checkbox"/> Phone	<input type="checkbox"/> In-Person	
Response:	<input type="checkbox"/> No	<input type="checkbox"/> Not bidding	<input type="checkbox"/> Is bidding \$	<input type="checkbox"/> Other (explain)	
Selected:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO (explain on CBI Form 2A)			
MBE/WBE/SBE Firm (Circle One):			Contact Person:		
Scope of Work:			NIGP Commodity Code:		
Initial Contact:	Date:	Method:	<input type="checkbox"/> Email	<input type="checkbox"/> Fax	<input type="checkbox"/> Courier
Follow-up:	Date:	Method:	<input type="checkbox"/> Phone	<input type="checkbox"/> In-Person	
Response:	<input type="checkbox"/> No	<input type="checkbox"/> Not bidding	<input type="checkbox"/> Is bidding \$	<input type="checkbox"/> Other (explain)	
Selected:	<input type="checkbox"/> Yes	<input type="checkbox"/> NO (explain on CBI Form 2A)			

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CBI FORM 2A: GOOD FAITH NEGOTIATION FORM

This Bidder must complete this form for each MBE, WBE, or SBE who submitted a project bid but was not included on the Bid submission.

A Bidder must submit CBI Form 2A within the time specified in the City Solicitation Documents. If no time period is specified in the City Solicitation Documents, the Bidder must submit Form 2A within three (3) Business Days after the City requests it.

Per Part B, Section 4.3 and Part C, Section 4.2 of the CBI Policy, Bidders must provide Good Faith Negotiation documentation within the time period specified by the City. Failure to comply with this requirement shall constitute grounds for rejecting a Bid.

Bidder Name:			
Project Name:	Coliseum Creek Stream Repair		
Project Number:	672-10-005	Contact Person Name:	

MBE/WBE/SBE INFORMATION

Firm Name	Scope of work for which a Bid was submitted	MBE/WBE/SBE Bid Amount

RATIONALE FOR REJECTING MBE/WBE/SBE’s SUBCONTRACTING BID:

Was the MBE/WBE/SBE’s bid higher than what was proposed by the subcontractor/supplier selected by the Bidder? Y N

Was the MBE/WBE/SBE’s bid higher than the Bidder’s cost of performing such work on its own? Y N

Who were the other Bidders?	What were the Bid Amounts?
1.	
2.	
3.	
4.	
5.	

Is the Business Enterprise that will be performing in place of the Interested MBE/WBE/SBE more qualified than the Interested MBE/WBE/SBE, to the extent that such difference in qualification would materially impact the Bidder’s Bid? Y N

Explanation:

Is there a material deficiency with the Interested MBE/WBE/SBE’s bid? (e.g. Bid submitted late; Bid had inaccurate information) Y N

Explanation:

If the MBE/WBE/SBE was **NOT** a “Qualified MWBE/Qualified SBE” (as defined in Part A of the CBI Policy), please state the reasons below:

Explanation:

CBI FORM 3: Subcontractor / Supplier Utilization Commitment (page 1 of 2)

This form **MUST** be submitted at the time of bid submittal. *Copy this CBI Form 3 as needed.*

Failure to properly complete and submit Form 3 at the time of Bid submittal constitutes grounds for rejection of the Bid.

Per Part B, Section 3 and Part C, Section 3 of the CBI Policy, the Subcontractor/Supplier Utilization Commitment (**CBI Form 3**), captures information regarding MBEs, WBEs, SBEs, and other subcontractors and suppliers that the Bidder intends to use on the Contract **FOR ALL TIERS**.

For Construction Contracts under \$500,000, MWSBEs must satisfy the requirements of Part B, Section 3 of the CBI Policy in order to count the work they intend to perform on the contract with its own current workforces towards the established Subcontracting Goal and must list themselves below along with their projected utilization amount.

Bidder Name:			
Project Name:	Coliseum Creek Stream Repair		
Project Number:	672-10-005		
Established MBE Goal: 7.00%	Established WBE Goal:	Established SBE Goal: 18.00%	

List below all **MBEs, WBEs, and/or SBEs** that you intend to use on this Contract. **NOTE: You will only receive credit for SBEs that are currently certified with the City as of the Bid submittal Date. Furthermore, you will only receive credit for MBEs and WBEs that are registered with the City as of Bid submittal Date.**

MBE/SBE Vendor Name (Non-Hauling Services)	MBE	SBE	Description of work / materials	NIGP Code	Vendor #	Total Projected Utilization (%)

For all hauling services on this Contract, list below all MBEs, WBEs, and SBEs that you intend to provide such work and the Total Projected Utilization (\$).

MBE/SBE Vendor Name (Hauling Services)	MBE	SBE	Description of work / materials	NIGP Code	Vendor #	Total Projected Utilization (%)

Total Subcontractor / Supplier Utilization (including MBEs and SBEs, and Non-MWSBEs) \$ _____

Total MBE Utilization \$ _____

Total SBE Utilization \$ _____

Total MSBE Utilization \$ _____

Total Bid Amount (including Contingency) \$ _____

Percent MBE Utilization* (Total MBE Utilization *divided by* Total Bid Amount) _____ %

Percent SBE Utilization* (Total WBE Utilization *divided by* Total Bid Amount) _____ %

Percent MSBE Utilization* (Total SBE Utilization *divided by* Total Bid Amount) _____ %

* The Utilization percentage stated **MUST** be rounded to (2) decimal places

CBI FORM 3: Subcontractor / Supplier Utilization Commitment (page 2 of 2)

List below all **non-MWSBE (subcontractors and suppliers)** that you intend to use on this Contract

Vendor Name	Description of work / materials	NIGP Commodity Code	Vendor #	Projected Utilization (if known) (\$)

Letters of Intent submitted upon notice from the City

Per Part B, Section 3.6 and Part C, Section 2 of the CBI Policy, within three (3) Business Days after receiving a request from the City (or within such longer time as may be communicated by the City in writing), Bidders must submit a separate Letter of Intent (**CBI Form 4**) for each MBE, WBE, and/or SBE listed on **CBI Form 3**. Each Letter of Intent must be executed by each MBE, WBE, and/or SBE and the Bidder. The City shall not count proposed MBE, WBE, and/or SBE utilization for which it has not received a Letter of Intent by this deadline. Per Part B, Section 3.3, a Regular Dealer as defined in the CBI Policy shall only count 60% of all expenditures towards the established Subcontracting Goal(s). In addition, a Hauler, Broker, or Packager shall only count fees or commissions charged for providing a Commercially Useful Function by the MBE, WBE, and/or SBE towards the established Subcontracting Goal(s). The Bidder is still obligated to pay the MBE, WBE, and/or SBE the full amount listed on the Contract with the MBE, WBE, and/or SBE regardless of what percentage is actually counted towards the MBE, WBE, and/or SBE goal.

Adding subcontractors or suppliers after submitting this form

Nothing in this certification shall be deemed to preclude you from entering into subcontracting arrangements after submission of this form. However, per Part D of the CBI Policy, you must comply with the following:

- You must maintain the level of MBE, WBE, and/or SBE participation proposed on this **CBI Form 3** (and **CBI Form 3A**, if applicable) throughout the duration of the Contract, except as specifically allowed in Part D.
- If you need to terminate or replace a MBE, WBE, and/or SBE, you must comply with Part D, Section 5.
- If the scope of work on the Contract increases, or if you elect to subcontract any portion of work not identified on this form as being subcontracted, then you must comply with Part D, Section 6.
- A Letter of Intent (**CBI Form 4**) must also be submitted for each MBE, WBE, and/or SBE you add subsequent to contract award.

All Subcontractors and Suppliers must be registered with the City of Charlotte.

Pursuant to the City’s Vendor Registration Policy, each subcontractor or supplier that you use on this contract must be registered in the City’s vendor database. You will need to provide the vendor number for each subcontractor or supplier used on this contract as a condition for receiving payment on this Contract.

Signature

Your signature below indicates that the undersigned firm certifies and agrees that:

- (a) It has complied with all provisions of the CBI Policy; and,
- (b) Failure to properly document such compliance in the manner and within the time periods established by the CBI Policy shall constitute grounds for rejection of your bid.

Signature of Authorized

Printed Name

Title

Submittal Date

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CBI FORM 3A: SUBCONTRACTOR/SUPPLIER UTILIZATION COMMITMENTS – ALTERNATES

Copy this CBI Form 3A as needed.

In the event Alternates are selected by the City, the established Subcontracting Goal(s) for this Contract will apply to the total contract amount, including contingency and the selected Alternates (“Total Contract Amount”). In such an instance, Bidders must identify additional MBE, WBE, and/or SBE commitments (for all tiers) and submit CBI Form 3A showing all commitments made after Bid submittal.

Bidder is not exempt from the CBI requirements due at bid time. In order to submit CBI Form 3A showing additional MBE, WBE, and/or SBE commitments, a Bidder **MUST** either (i) have submitted CBI Form 3 within twenty-four (24) hours of Bid submittal with 100% (or more) of the established Subcontracting Goal(s) met on the Total Contract Amount, or (ii) have met the Good Faith Efforts and Good Faith Negotiation requirements set forth in Part B Sections 4 and 5 and Part C Sections 4 and 5 of the CBI Policy. If the Bidder fails to meet either the established Subcontracting Goal(s), or the Good Faith Efforts and Good Faith Negotiation requirements set forth in Part B Sections 4 and 5 and Part C Sections 4 and 5 of the CBI Policy, the Bid shall be rejected.

A Bidder must submit CBI Form 3A within three (3) Business Days after the City requests it.

Bidder Name:			
Project Name:	Coliseum Creek Stream Repair		
Project Number:	672-10-005		
Established MBE Goal: 7.00%	Established WBE Goal:	Established SBE Goal: 18.00%	

List below the additional MBE, WBE, and/or SBE commitments that you intend to use on this Contract, committed post-Bid submittal, as a result of alternates selected by the City. Scopes of work and NIGP codes listed below on Form 3A cannot have been listed on CBI Form 3, unless the amended utilization is associated with an MBE, WBE, and/or SBE already listed on CBI Form 3.

Name of MBE, WBE, SBE	Description of work / materials	NIGP Commodity Code	Vendor #	Total Projected Utilization (\$)

Form 3A MBE Utilization	\$ _____
Form 3A WBE Utilization	\$ _____
Form 3A SBE Utilization	\$ _____
Initial Form 3 MBE Utilization	\$ _____
Initial Form 3 WBE Utilization	\$ _____
Initial Form 3 SBE Utilization	\$ _____
Cumulative MBE Utilization (Form 3 & Form 3A)	\$ _____
Cumulative WBE Utilization (Form 3 and Form 3A)	\$ _____
Cumulative SBE Utilization (Form 3 and Form 3A)	\$ _____
Total Contract Amount (including Contingency and alternates selected by the City)	\$ _____
Percent MBE Utilization (Cumulative MBE Utilization <i>divided by</i> Total Contract Amount)	_____ %
Percent WBE Utilization (Cumulative WBE Utilization <i>divided by</i> Total Contract Amount)	_____ %
Percent SBE Utilization (Cumulative SBE Utilization <i>divided by</i> Total Contract Amount)	_____ %

Your signature below indicates that the undersigned Business Enterprise certifies and agrees that: (a) It has complied with all provisions of the CBI Policy; and (b) failure to properly document such compliance in the manner and within the time periods established by the CBI Policy shall constitute grounds for rejection of your bid.

_____ Signature of Authorized Official	_____ Printed Name	_____ Title	_____ Submittal Date
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CBI FORM 4: LETTER OF INTENT

Per Part B, Section 3.4 and Part C, Section 2.1 of the CBI Policy, within three (3) Business Days after receiving a request from the City (or within such longer time as may be communicated by the City in writing), a Bidder must submit a separate Letter of Intent for each MBE, WBE, or SBE listed on CBI Form 3 and CBI Form 3A (if applicable).

Project Name:	Coliseum Creek Stream Repair
Project Number:	672-10-005

To be completed by the Bidder	
Name of Bidder:	Vendor #:
Address:	
Contact Person:	Email:
Telephone:	Fax:

If the Bidder has entered into a Quick Pay Agreement, in association with this Letter of Intent and as defined in the CBI Policy, please attach a copy of the executed Agreement with the undersigned MBE, WBE, or SBE.

Identify in complete detail the scope of work to be performed or item(s) to be supplied by the MBE, WBE, or SBE.

Cost of work to be performed by MBE, WBE, or SBE: \$ _____

To be completed by MBE, WBE, or SBE	
Name of MBE, WBE or SBE	Vendor#:
Address:	
Contact Person:	Email:
Telephone:	Fax:

Upon execution of a Prime Contract with the City for the above referenced project, the Bidder certifies that it intends to utilize the MBE, WBE, or SBE listed above, and that the description, cost and percentage of work to be performed by the MBE, WBE, or SBE as described above is accurate. The MBE, WBE, or SBE firm certifies that it has agreed to provide such work/supplies for the amount stated above.

Bidder:	_____
Signature and Title	
MBE/WBE/SBE:	_____
(Circle one) Signature and Title	

CBI FORM 5 - GOOD FAITH EFFORTS (GFE) AND STATEMENT OF GFE COMPLIANCE(PAGE 1 OF 2)

Bidder Name:	
Project Name:	Coliseum Creek Stream Repair
Project Number:	672-10-005

Per Part B, Section 5 and Part C, Section 5 of the CBI Policy, if a Bidder has not fully met the **established Subcontracting Goal(s)** for this project, then the Bidder must document it has met the GFE requirements by completing this Form. GFE Points will be calculated, independently, for each Subcontracting Goal that is not met. For instance, if the Bidder fails to meet MBE and WBE goal or the SBE goal that was set, the Bidder will have to earn the minimum GFE points for MBEs and WBEs or the minimum GFE Points for SBEs.

Detailed information of the City's GFE requirements can be found in the CBI Policy, Part B, Section 5 and Part C, Section 5. The Bidder must submit CBI Form 5 within three (3) Business Days after the City requests it, unless specified otherwise in the City Solicitation Documents. Failure to do so constitutes grounds for rejection of the Bid. Below is a list of Good Faith Efforts as defined in Part B, Section 5 and Part C Section 5. To the left of each item is the number of points assigned to that item. Please place an "X" in the first column for each item you are claiming credit. Failure to achieve the minimum number of Good Faith Efforts points stated in the box below constitutes grounds for rejection of your bid.

NOTE: All actions necessary to earn GFE Points must be undertaken prior to Bid submittal.

Total Available GFE Points is: 145		Minimum Number of GFE Points Required for this Project is: 50
Points	Good Faith Effort (GFE)	
<input type="checkbox"/>	10	<p>Section 5.3.1: Contacts. The Bidder must contact SBEs and MBEs in a manner reasonably calculated to meet the established Subcontracting Goal(s) for the Contract. Factors considered may include but are not limited to:</p> <ul style="list-style-type: none"> (a) The number of available MBEs, WBEs, or SBEs contacted; (b) Whether the Bidder directed its contacts to MBEs, WBEs, and/or SBEs listed as performing scopes of work sufficient to meet the MBE, WBE, or SBE goals; (c) Whether the contacts were made at least 10 Days before Bid submittal; (d) How the contacts were made and whether they were documented in a verifiable way (and in compliance with any forms provided by the City); (e) Whether the substance of the Bidder's solicitation was reasonably sufficient to generate a response from MBEs, WBEs, or SBEs; (f) Whether the Bidder promptly and adequately responded to inquiries received from MBEs, WBEs, or SBEs; and (g) Whether the Bidder made follow up contacts to MBEs, WBEs, or SBEs that did not respond to the Bidder's initial contact.
<input type="checkbox"/>	10	<p>Section 5.3.2: Making Plans Available. To receive credit for this GFE, the Bidder must: (i) make "Project Documents" (as defined below) available for inspection by MBEs, WBEs, and/or SBEs at least 10 Days before Bid submittal; and (ii) notify the MBEs, WBEs, or SBEs contacted under GFE 5.3.1 of the way in which Project Documents will be made available.</p> <p>A Bidder may receive credit for GFE 5.3.2 only if it receives credit for GFE 5.3.1 (Contacts), and only if it responds promptly to any requests made for access to the Project Documents.</p>
<input type="checkbox"/>	10	<p>Section 5.3.3: Breaking Down Work. The Bidder must demonstrate to the City's satisfaction that it broke down or combined elements of work into economically feasible units to facilitate SBE and MBE participation. In awarding points, the City will consider the number and dollar value of the scopes of work the Bidder listed in its written invitation for participation by MBEs, WBEs, or SBEs, whether those scopes would be sufficient to meet the established Subcontracting Goal and how the Bidder notified MBEs, WBEs, or SBEs of its willingness to break down the work into such units. Simply restating the City's subcontracting scopes as listed in the City's Solicitation Documents will not earn this GFE. A Bidder may receive credit for this GFE only if it receives credit for GFE 5.3.1(Contacts).</p>
<input type="checkbox"/>	10	<p>Section 5.3.4: Working With MBE/WBE/SBE Assistance Organizations. The Bidder must document that it worked with an Assistance Organization for MBEs, WBEs, and SBEs to provide assistance in recruiting MBEs, WBEs, or SBEs for the Contract for which Bids are sought.</p>

CBI FORM 5 - GOOD FAITH EFFORTS (GFE) AND STATEMENT OF GFE COMPLIANCE (PAGE 2 OF 2)

Points		Good Faith Effort (GFE)
<input type="checkbox"/>	10	Section 5.3.5: Attendance at Pre-Bid. To receive credit for this GFE, the Bidder must attend any pre-bid meetings scheduled by the City for the Contract in question.
<input type="checkbox"/>	20	Section 5.3.6: Bonding or Insurance Assistance on Construction Contract. The Bidder must assist a MBEs, WBEs, or SBEs in getting required bonding or insurance coverage for the Contract at issue or provide alternatives to bonding or insurance for MBEs, WBEs, or SBEs. To document satisfaction of this GFE, the Bidder must submit: (a) the name of the MBE, WBE, or SBE; (b) a description of the assistance the Bidder provided; (c) the date the Bidder provided the assistance; (d) the name of a contact person with the MBEs, WBEs, or SBEs who can verify that the Bidder provided the assistance; and (e) any additional information requested by the City. No credit will be given for assistance provided to an Affiliate of the Bidder. In deciding whether to award points for this GFE, the City will consider how significant and meaningful the assistance was, how many MBEs, WBEs, or SBEs it was offered to, and what impact it likely had on the Bidder's efforts to recruit MBEs, WBEs, or SBEs for the project.
<input type="checkbox"/>	10	Section 5.3.7: Negotiating in Good Faith with MBEs/WBEs/SBEs. The Bidder must: (a) demonstrate that it negotiated in good faith with interested MBEs, WBEs, or SBEs (which means showing at least some back and forth negotiation between the Bidder and MBEs, WBEs, or SBEs); (b) demonstrate that it did not reject any MBEs, WBEs, or SBEs as unqualified without sound reasons based on their capabilities; (c) document in writing the reasons for rejecting any MBEs, WBEs, or SBEs for lack of qualification.
<input type="checkbox"/>	25	Section 5.3.8: Financial Assistance. The Bidder must provide one of the following types of assistance to an MBEs, WBEs, or SBEs in connection with the Contract: (a) assistance in obtaining equipment, a loan, capital, lines of credit, (b) joint pay agreements or guaranties to secure loans, the purchase of supplies, or letters of credit, including waiving credit that is ordinarily required; or (c) assistance in obtaining the same unit pricing with the Bidder's suppliers as the Bidder. To receive credit for this GFE, Bidders must document: (a) the name of the MBEs, WBEs, or SBEs; (b) the description of the assistance the Bidder provided; (c) the date the Bidder provided the assistance; and (d) the name of a contact person with the MBEs, WBEs, or SBEs who can verify that the Bidder provided the assistance. No credit will be given for assistance provided to an Affiliate of the Bidder. In deciding whether to award points for this GFE, the City will consider how significant and meaningful the assistance was, how many MBEs, WBEs, or SBEs it was offered to, and what impact it likely had on the Bidder's efforts to recruit MBEs, WBEs, or SBEs for the project.
<input type="checkbox"/>	20	Section 5.3.9: Entering Into Joint Venture. To receive credit for this GFE, the Bidder must demonstrate that it negotiated a Joint Venture or partnership arrangement with one or more MBEs and WBEs or SBEs, as applicable, on the Contract. To receive credit for this GFE, Bidders must document; (a) the name of the MBEs and WBEs or SBEs; (b) a description of the Joint Venture or partnership; (c) evidence of the date the MBEs and WBEs or SBEs entered into the agreement; and (d) the name of a contact person with the MBEs and WBEs or SBEs who can verify the terms of the agreement. No credit will be given for a joint venture with an Affiliate of the Bidder.
<input type="checkbox"/>	20	Section 5.3.10: Quick Pay Agreements on the Construction Contract Up For Award. For purposes of this Section, the term "Quick Pay Commitment" means an agreement or policy commitment to pay all MBEs, WBEs, or SBEs participating in the Contract within 20 Days after the Contractor confirms that the MBE, WBE, SBE has properly performed and the MBE's, WBE's, or SBE's work has been properly completed. To receive credit for this GFE, Bidders must provide the City with a copy of the Quick Pay Commitment and documentation showing that the Bidder informed each MBEs, WBEs, or SBEs about the Quick Pay Commitment as part of the Bidder's MBEs, WBEs, or SBEs contacts under Section 5.3.1. No Bidder will receive credit for (i) any statement indicating that the Bidder will consider entering into a Quick Pay Commitment or (ii) any statement made verbally but not in written form to communicate the Quick Pay Commitment. A Bidder may receive credit for this GFE only if it receives credit for GFE 5.3.1(Contacts)

Total GFE Points (Claimed by Bidder) _____ **Total GFE Points Earned (Assessed by City)** _____

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CBI FORM 6: PAYMENT AFFIDAVIT - SUBCONTRACTOR / SUPPLIER UTILIZATION

Per Part D, Section 9 of the CBI Policy, for Contracts of \$10,000 or more, Contractors must submit this form with each request for payment from the City of Charlotte showing work that has been completed and approved for all subcontractors, suppliers, manufacturers, brokers, and / or members of a joint venture in connection with the Contract. Copy this form as needed. The Contractor on the Prime Contract (i.e. prime) is responsible for collecting and submitting CBI Form 6 from all subsequent lower tiers.

Project Name: _____

Company Name: _____ Payment / Invoice # _____

Contract Number: _____ Invoice Amount: \$ _____

Payment Period: From _____ To _____ City Department: Department of General Services

FINAL PAYMENT Check this box only when submitting Final Pay request.

Section 1: Payments to SUBCONTRACTORS (MBEs/WBEs/SBEs and Non-MBEs/WBEs/SBEs)

Complete the chart below for all subcontractors used on the Project/Contract regardless of dollar amount. All subcontractors must be registered in the City's Vendor System.

Subcontractor's Name	Certification: MBE/WBE/SBE	Description of Work Performed	NIGP Code	Vendor #	Payments this Period	Cumulative Payments

Section 2: Payments to SUPPLIERS

All suppliers providing goods under City contracts must be listed on the Sales Tax Statement submitted with each pay request. The City may request on a case-by-case basis that the Contractor require certain suppliers to be registered in the City's Vendor System and may withhold payment of any amounts due the Contractor in the event the Contractor fails to comply with such request.

The undersigned Business Enterprise certifies the preceding chart is a true and accurate statement of all payments that have been made to subcontractors on this Project/Contract, and that all Suppliers providing goods under this contract have been listed in the Sales Tax Statements submitted to the City in connection with this Payment Affidavit. If no subcontractors or suppliers are listed on the preceding chart or Sales Tax Statements, the Business Enterprise certifies that no subcontractors or suppliers were used in performing the Project/Contract for the payment period indicated. Failure to provide accurate and truthful information is a violation of the Charlotte Business INclusion Policy and may result in the sanctions prescribed therein.

This _____ day of _____ 20 _____

Signature

Print Name and Title

To be completed by City for FINAL PAYMENT

Total Paid to MBEs:	\$	MBE Goal:	%	MBE Goal Commitment:	%	MBE Goal Attainment:	%
Total Paid to WBEs:	\$	WBE Goal:	%	WBE Goal Commitment:	%	WBE Goal Attainment:	%
Total Paid to SBEs:	\$	SBE Goal:	%	SBE Goal Commitment:	%	SBE Goal Attainment:	%
Total Paid to Contractor:	\$						

ITEMIZED BID FORMS AND SUPPLEMENTS

ITEMIZED BID FORM

Bidder Name: _____
Project #: 672-10-005
Project Name: Coliseum Creek Stream Repair

SECTION 1: BID

Item	Section	Item Description	Qty	Unit	Unit Price	Amount (QTY x Unit Price)
1	800	Mobilization	1	LS		
2	SP-01R	Comprehensive Grading	1	LS		
3	SP-03	Borrow Excavation	50	CY		
4	SP-04	Erosion Control	1	LS		
5	SP-05R	Stepped Outlet Protection	4	CY		
6	226	Undercut Excavation	10	CY		
7	876	Riprap (Class A, Class B, Class I & Class II)	45	TN		
8	SPL-01	Live Stakes	375	EA		
9	SPL-02	Riparian Seeding	250	SY		
10	SPSRW-01	Timber Mat	450	SF		
11	SPSRW-02	Sill, Log	20	LF		
12	SPSRW-03	Pump Around Operation	45	DY		
13	SPSRW-04	Riffle, Angled Log	75	SY		
14	SPSRW-05R	Erosion Control Matting – Coir Fiber 700	140	SY		
15	SPSRW-06	Impervious Dike	30	LF		
16	SPSRW-07	Special Stilling Basins	2	EA		
Subtotal						
20% Contingency						
Total Bid						

Do **not** include any North Carolina Sales and Use Tax that qualifies as Eligible Taxes per Section 00 70 00, Subsection 2.17 “Sales and Use Tax”.

CBI PLACEHOLDER

Must be Submitted With Bid



Bidder shall insert applicable CBI Forms provided in the Charlotte Business Inclusion (CBI) Program Section – following this page with their bid.

WORKFORCE SAFETY PLAN FOR ENCROACHMENT ACTIVITIES: COVID-19

EFFORTS THE N.C. TRANSPORTATION INDUSTRY IS TAKING TO STOP THE SPREAD OF COVID-19

Workforce Safety Plan: COVID-19 (Updated: 4/11/2020)

NCDOT Encroachment ID#: _____

The North Carolina Department of Transportation (NCDOT) and their partners expect all parties involved in the delivery of transportation projects to abide by the guidelines issued from the Centers for Disease Control and Prevention (CDC) and the North Carolina Department of Health and Human Services (NCDHHS).

Response to COVID-19 is rapidly evolving; new information and guidelines may be issued from the CDC, NCDHHS, or other state or federal agencies. NCDOT and their partners should review the current CDC and NCDHHS guidance, including the resources listed at the end of this document, for up-to-date information on how to respond to COVID-19. Additional guidelines may be issued by state or federal agencies that should be followed in addition to the guidance included in this document.

Though certain Americans with Disabilities Act (ADA) requirements have been relaxed in response to the pandemic, employers must still maintain all information about employee illness as a confidential medical record in compliance with the ADA. If an employee is suspected of having or tests positive for COVID-19, it is essential that management keep the identity of the employee and details related to the employee's health confidential.

Below are precautions required by NCDOT and from encroaching parties and their contractors performing construction within NCDOT Rights of Way. The term employee refers to any person on a job site within NCDOT right of way for the purpose of constructing or inspecting the work related to construction of a facility under an approved encroachment agreement and where that employee may or may not be under employment by or under contract to NCDOT.

EMPLOYEE WELLNESS

- If an employee has not yet reported to work and develops any COVID-19 symptoms (i.e. fever, coughing, or shortness of breath) — STAY HOME and immediately:
 - Call a health care provider
 - Self-Isolate
 - Communicate with your supervisor
 - Remain calm and follow all instructions from your health care provider
- Employees who appear to have acute respiratory illness symptoms (i.e. cough, shortness of breath) upon arrival to work, or become sick during the day, should be separated from others and sent home immediately. The potentially affected employees should immediately follow the steps outlined above, which includes immediately contacting a health care provider.
- Should an employee show symptoms of acute respiratory illness or be diagnosed with COVID-19, all other employees who have worked in close proximity to the affected employee during the last 14 days and all encroachment points of contact indicated at the end of this plan should be notified of potential exposure to the disease without identifying the affected employee.
- Consideration should be given to employees at "High Risk" of severe illness from COVID-19, who, per NCDHHS, include employees:

- Over 65 years of age, **OR**
- With underlying health conditions including heart disease, lung disease, or diabetes, **OR**
- With weakened immune system
- “High Risk” Employees should be given the opportunity to discuss alternate work arrangements/duties with their employer or take leave according to their company policies.
- For guidance on confirmed positive tests for COVID-19, refer to the most recent version of the “COVID-19 Guidance for Employees on Encroachment Job Sites within NCDOT Right of Way” located on last page of this plan.

PERSONAL HYGIENE

- Clean hands often by washing with soap and water for 20 seconds. If soap and water are not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains 60%-95% alcohol may be used.
- Avoid touching your eyes, nose, mouth, or other parts of your face.
- Do not breathe, cough, or sneeze on another person or into the open air. Employees should cover their noses and mouth with a tissue when coughing or sneezing (or an elbow or shoulder if no tissue is available).
- A facemask for covering nose and mouth is encouraged on the job site.
- Appropriate gloves are encouraged while performing functions of the job.

CLEANING/DISINFECTING

- Wash stations and/or hand sanitizer are encouraged on each project site.
- Appropriate cleaning staff should clean frequently touched surfaces and objects with disinfectants at a minimum of once per day.
 - Office/buildings: door knobs, light switches, phones, computers/keyboards, copy machines, elevator buttons, toilets, faucets, sinks, countertops, paper towel dispensers, desktops, handrails, folders, vending machines, counters, tables, cabinets/knobs, etc.
 - Shop Yard/Jobsite: vehicle/equipment door handles, keys, gear shifts, steering wheel/operator controls and levers, fuel pump dispensers, touch points on machinery, etc.
 - Electronic equipment: cell phones, computers, keyboards, etc.

Appropriate cleaning staff should sanitize/disinfect facilities and work areas after persons suspected/confirmed to have COVID-19 have been in the facility or work area.

- It is recommended to close off access to areas used by the ill persons and wait as long as practical, 24 hours if possible, before beginning cleaning and disinfection to minimize potential for exposure to respiratory droplets. Open outside doors and windows to increase air circulation in the area if possible.
- Appropriate cleaning staff should clean and disinfect all areas used by the ill persons, focusing especially on frequently touched surfaces.

GENERAL

- Increase communication measures between all parties regarding schedule, daily activities, etc. to reduce/minimize worker exposure in accordance with but not limited to the requirements below.



- Minimize on-site personnel such as subcontractors, work crews, QC personnel, and inspection staff to those required for that day's activities. If work is postponed or cancelled, immediately notify appropriate parties.
- Practice "Social Distancing" whenever feasible. Social Distancing is designed to limit the spread of a disease by reducing the opportunities for close contact between people. All personnel have the responsibility to remind each other to stay 6 feet or more apart. Examples of Social Distancing include:
 - Reducing face-to-face exposure by using conference calls and video conferencing
 - If an in-person meeting is absolutely required and cannot be rescheduled or attended remotely, the meeting is limited to a maximum of 10 people while maintaining Social Distancing of 6 feet or more.
 - Avoiding unnecessary travel
- Do not congregate at lunch or breaks. Bringing your lunch is encouraged.
- No communal coolers or drink stations are allowed. Supervisors should confirm with employees prior to beginning work for appropriate hydration and nutrition availability to employees for the duration of the employee's shift and without direct contact with others on the job site.
- First line of communication should be by phone, rather than in-person.
- Do not shake hands.
- Do not share iPads, tablets, pens, or clipboards for signing or any other purpose. Take pictures as proof of attendance at meetings.
- Sharing of Personal Protective Equipment (PPE) is strictly prohibited.
- Vehicles, equipment, and tools
 - Limit the number of people riding in a vehicle together.
 - Wipe down and disinfect vehicles after each trip.
 - As much as possible, do not share tools or equipment. If a tool or piece of equipment must be shared, the parts of it that are touched should be sanitized between uses.

RETURN TO WORK

- The following criteria must be followed for an employee who is tested for Covid-19, or asked to self-quarantine by health officials, or has contact with another employee with a positive test result to return to work:
 - at least a 14-day quarantine; **OR**
 - release by a health care provider.
- In accordance with CDC guidance, the following criteria must be followed for an employee with a positive test result to return to work:
 - at least 14 days from positive test notification; **AND**
 - at least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath); **AND**
 - at least 7 days have passed since symptoms first appeared.

NCDOT may require certification of fitness to work from a health care provider.

ADDITIONAL RESOURCES

NCDOT and their partners should review the CDC and NCDHHS resources listed below for up-to-date information on how to respond to COVID-19. Additional guidelines may be issued by state or federal agencies that should be followed in addition to the guidelines included in this document.

- NCDHHS COVID-19 Resources:
 - <https://www.ncdhhs.gov/divisions/public-health/coronavirus-disease-2019-covid-19-response-north-carolina>
- NCOSHR Communicable Disease Emergency Policy
 - <https://oshr.nc.gov/policies-forms/workplace-wellness/communicable-disease-emergency>
- OSHA Guidance on Preparing Workplaces for COVID-19
 - <https://www.osha.gov/Publications/OSHA3990.pdf>
- CDC COVID-19 Resources:
 - <https://www.cdc.gov/coronavirus/2019-ncov/index.html>





AGREEMENT

The encroaching party shall adhere to the requirements of this plan in order to continue work under their approved encroachment agreement. Violations to this plan could result in the violating entity not being allowed to continue work or all work ceasing as determined by the NCDOT District Engineer or Resident Engineer.

PROJECT POINTS OF CONTACT

NCDOT	Encroaching Party (Primary Contact)
Name: _____ Phone #: _____	Name: _____ Phone #: _____
	Primary Contractor to Encroaching Party (Point of Contact) Name: _____ Phone #: _____



COVID-19 Guidance for Employees on Encroachment Job sites within NCDOT Right of Way				
Relationship to Confirmed POSITIVE Test		CONTACT GROUP		
		What YOU Should Do	What your CREW Should Do <i>Exposure within 6' and longer than 10 minutes</i>	What PROJECT SITE Personnel Should Do <i>No exposure within 6' and longer than 10 minutes</i>
Employee		Notify your supervisor Self-quarantine for 14 days	Advise of POSITIVE test without identifying the affected employee* Directly exposed crew self-quarantine for 14 days Continue hygiene & disinfecting measures	Advise of POSITIVE test without identifying the affected employee* Site personnel without direct contact may continue onsite work or follow their company policy Continue hygiene & disinfecting measures
Direct Contact <i>Interaction with an infected person within 6' and longer than 10 minutes</i>		Self-quarantine for 14 days	Advise of POSITIVE test without identifying the affected employee* Crew may continue onsite work or follow their company policy Continue hygiene & disinfecting measures	Advise of POSITIVE test * Continue hygiene & disinfecting measures
Secondary Contact		You may continue onsite work or follow your company policy Continue hygiene & disinfecting measures	Continue hygiene & disinfecting measures	Continue hygiene & disinfecting measures
Two or more Persons Removed from Contact		Continue hygiene & disinfecting measures	Continue hygiene & disinfecting measures	Continue hygiene & disinfecting measures
*Notification Protocol <i>(Comply with HIPAA & ADA confidentiality requirements)</i>	NCDOT employee / agent tests POSITIVE	NCDOT District Engineer/Resident Engineer notifies Encroaching Party's primary point of contact and Contractor Point of Contact, CDC and, if Resident Engineer has oversight for the job site, FHWA any Consultant Firms working for NCDOT Encroaching party representative notifies other Contractors, Sub-Contractors and Suppliers with exposed Employees		
	Encroaching Party or Contract crew member on job site tests POSITIVE	Encroaching party representative or Contractor point of contact notifies appropriate NCDOT District Engineer or Resident Engineer and all other Contractors, Sub-Contractors and Suppliers with exposed Employees NCDOT notifies CDC, and as appropriate, FHWA and any Consultant Firms working for NCDOT		

EXECUTION OF BID

NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the Bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the Bidder has not been convicted of violating North Carolina General Statute 133-24 within the last three years, and that the Bidder intends to do the work with its own bona fide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

NC General Statute 133-32 prohibits the offer to, or acceptance by, any City employee of any gift from anyone with a contract with the City or State, or from any person seeking to do business with the City of Charlotte. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

In the event the Bidder is awarded the Contract, execution of the Bid by the Bidder is considered the same as execution of the Contract. Affixing the corporate seal to this document is only intended to verify the officer signing on behalf of the corporation has the authority to do so.

The undersigned, having carefully examined the site and familiarized himself with the existing conditions on the Project area affecting the cost of work and hereby proposes to furnish all supervision, labor, equipment, materials and services required to construct and complete the Project in accordance with the Project Manual at and for the Total Amount Bid, excluding any Allowances, such as contingency, which may be used by the Contractor only upon written instructions from the Engineer in accordance with the terms of this Contract.

The undersigned acknowledges receipt of the following addenda (initial next to each addendum):

1: _____ # 2: _____ # 3: _____ # 4: _____ # 5: _____ # 6: _____ # 7: _____ # 8: _____ # 9: _____

Type of Bidder: Sole Proprietor Partnership Corporation Limited Liability Company

(check 1 box)

Joint Venture

(if joint venture, complete this "Execution of Bid" sheet for each joint venture company and identify the "Name of Joint Venture" on each sheet)

NAME	OF	JOINT	VENTURE:

Company Name: _____

Mailing Address: _____

City/State/Zip: _____

Phone: _____ Email: _____

Printed Name: _____ Title: _____

Signature: _____ NC Gen. Contractor License #: _____

Subscribed and sworn to before me this _____ day of _____ 202__

Signature of Notary Public _____
of _____ County

State of _____

My Commission Expires: _____



ACCEPTANCE BY THE CITY

A CONTRACT FOR:

PROJECT NAME: Coliseum Creek Stream Repair

PROJECT NUMBER: 672-10-005 CONTRACT NUMBER: _____

CONTRACT AMOUNT (\$): _____

THIS CONTRACT (the "Contract") is made and entered into and shall be effective as of _____, 20__ (the "Effective Date"), by and between the CITY OF CHARLOTTE, a North Carolina Municipal corporation (the "City"), and _____, a company doing business in North Carolina (the "Contractor").

WHEREAS the City of Charlotte advertised an Invitation to Bid (ITB) for the Project on _____, together with all attachments and addenda,

WHEREAS the Contractor submitted to the City a Bid on _____ in response to the ITB, together with all attachments and separately sealed confidential trade secrets, herein referred to as the "Bid",

WHEREAS the execution of the Bid is the same as the execution of the Contract by the Contractor,

WHEREAS the City of Charlotte is recommending the subject contract for construction services be awarded to your firm for the contract sum of \$_____ by the City Manager.

WHEREAS this Contract includes the following:

- a. Project Manual, including all addenda issued prior to execution of the Contract;
- b. Plans;
- c. Contractor's Bid;
- d. Performance & Payment Bonds;
- e. Acceptance by the City; and
- f. Executed Change Orders issued after execution of the Contract.

WHEREAS the City and the Contractor now desire to fully execute this Contract for the Contractor to provide construction services for the Project in accordance with the terms and conditions set forth in the Contract,

NOW, THEREFORE, the City of Charlotte, has caused this Contract to be executed in the name of the City of Charlotte by an authorized official.

CITY OF CHARLOTTE:

CONTRACTOR:

By: _____

Print Name: _____

Title: _____

Date: _____

BY: _____

Print Name: _____

Title: _____

Date: _____



EVIDENCE OF INSURANCE

[To be furnished by Contractor after Notice of Intent to Award]



STATE / COUNTY SALES / USE TAX STATEMENT

Project: Coliseum Creek Stream Repair

Contractor/Subcontractor _____

Period Covered: _____ PAGE: _____ of _____

Invoice No.	Invoice Date	Vendor's Name	City Vendor No.	Amount Before taxes	NC Tax	County Tax	Total Invoice Amount	County Paid

Subtotal (Page 1)	\$	\$	\$	\$
Plus total cost of material withdrawn from our warehouse stock	\$	\$	\$	\$

GRAND TOTAL	\$	\$	\$	\$
--------------------	----	----	----	----

I certify that the above listed vendors were paid sales tax upon purchases of building material during the period covered by the construction estimate, and the property upon which such taxes were paid with or will be used in the performance of this contract. No tax on purchases of tangible personal property purchased by such contractors for use in performing the contract which does not annex to, affix to, or in some manner become part of the project, building, structure or repairs included in the above list.

Signed: _____

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

Signature of Notary Public _____

of _____ County

State of _____

My Commission Expires: _____



CONTRACTOR'S AFFIDAVIT

RELEASE AND WAIVER OF CLAIM

STATE OF: _____ COUNTY OF: _____

_____, _____
(Name) (Title)

_____, being first duly sworn, deposes and says that:
(Contractor)

1. The undersigned is authorized to execute this Affidavit, Release and Waiver of Claim on behalf of the Contractor and has personal knowledge of all facts set forth herein;

2. This Affidavit, Release and Waiver of Claim is made concerning the construction of the following project:

Project Name: Coliseum Creek Stream Repair

Project No.: 672-10-005

3. All payrolls, material bills, sales tax, social security tax, state and federal unemployment insurance, and all other liabilities and taxes owed by the Contractor and arising in any manner from the above-described project have been paid in full;

4. No claim or lien exists in favor of any supplier of materials or labor or in favor of any subcontractor furnishing materials or labor on the above-described project;

5. Notwithstanding the foregoing, if the City of Charlotte or property of the City of Charlotte is subject to any claim or lien which arises in any manner from the failure of the Contractor to pay any liability described above, the Contractor will indemnify and hold the City of Charlotte harmless for any amount which the City of Charlotte is required to pay to discharge such lien or settle such claim and further will pay the City of Charlotte's expenses, costs, and attorney fees incurred in connection therewith;

6. All claims, suits, and proceedings of every name, description, or nature arising out of the above project against the City of Charlotte, its officers, employees and agents have been settled;

7. The Contractor releases and waives any and all claims of every type and description which the Contractor may have against the City of Charlotte arising in any manner from the construction of the above-described project.

(Contractors Signature)

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

Signature of Notary Public _____

of _____ County

State of _____

My Commission Expires: _____



EXHIBIT 1: PROJECT SPECIAL PROVISIONS

ARTICLE 1: GENERAL REQUIREMENTS

1.1 Contract Time

The Contract Time will begin upon the issuance of the Notice to Proceed and will extend 120 calendar days thereafter.

1.2 Liquidated Damages

Liquidated Damages will be assessed at the rate of \$500 per calendar day for failure to complete the Project within the Contract Period.

1.3 Price Adjustments – Asphalt Cement for Plant Mix

“Asphalt Binder for Plant Mix” will be in accordance with Section 620 of the NCDOT Standard Specifications.

The Bidder shall consider that the City will make adjustments in payments due the Contractor where it has been determined that the average terminal F.O.B selling price of asphalt cement has fluctuated.

The Base Price Index for Asphalt Cement for this project is set at \$639.38 per ton.

This Base Price Index represents an average F.O.B. selling price of asphalt cement at supplier’s terminals on May 4, 2023, as determined by the North Carolina Department of Transportation from a survey of terminals located in North Carolina and adjacent states.

<https://connect.ncdot.gov/projects/construction/Pages/Pavement-Construction-Prices.aspx>

Payment will be made under:

ASPHALT BINDER FOR PLANT MIXTN

1.4 Bituminous Plant Mix Pavements - Recycled

Work in this provision consists of all work covered in Section 1012, "Aggregate for Asphalt Pavements and Surface Treatments" in the NCDOT Standard Specifications, except that the provisions of this section pertaining to compensation shall not apply.

The Engineer will determine acceptability of materials and construction in accordance with the applicable sections of these specifications. Following the application of the appropriate acceptance plan, the decision of the Engineer shall be final as to the acceptance, rejection, or acceptance at an adjusted payment of the material.

Nonconforming materials, projects, items of construction, or complete construction that are not adaptable to correction by reworking shall be removed and replaced, accepted without payment, or accepted at an adjusted payment as stated in these specifications, or if not stated, as directed by the Engineer.

DESIGN MIX FORMULA

The Contractor shall submit for the Engineer's approval, a job mix formula approved by the NCDOT or a job mix formula within the limits of the NCDOT Standard Specifications accompanied by the recommendation of an independent testing laboratory. The formula shall include aggregate gradation, bitumen content, stability, theoretical specific gravity, laboratory specific gravity, percent of voids, and unit weight. The Engineer has the right to reject a state approved mix based on the content of Rap material. For this Contract, RAP (reclaimed asphalt pavement), shall not constitute more than 30% of the total material used in recycled mixtures - with no allowance for RAS (reclaimed asphalt shingles – maximum 0%).



INTENT OF SPECIFICATIONS

It is the intent of these specifications to provide an equitable means of accepting materials and work that may vary slightly from the specification range stated in the NCDOT Standard Specifications in lieu of total rejection, removal, repair or nonpayment.

When materials or construction are not within the limits of the specification, an adjusted payment maybe allowed as delineated in these specifications, except where the level and variability of test results indicate a degree of nonconformance with requirements so great as to make the material or construction unacceptable. Unacceptable material and construction shall be either reworked or replaced at no cost to the City. The Engineer reserves the right to reject questionable material at any time in lieu of making reduced payment.

COMPENSATION:

Payment at the contract unit prices for the various items covered by Section 610 will be full compensation for all work covered by this section except as provided below.

There will be no separate payment for furnishing non-strip additive. The cost of non-strip additive shall be included in the contract unit price per ton for "Asphalt Concrete Surface Course, S 9.5 B, SF 9.5 A and S 9.5 C".

Where samples of reclaimed asphalt pavement are obtained by milling, removal of the milled pavement will be paid for as provided in Section 607. The plant mix used for replacing the milled pavement will be paid for as provided by the section of the Specifications covering the type of plant mix used.

1.5 Contractor Quality Control

The Contractor shall establish, provide, and maintain an effective quality control program that details the methods and procedures to be taken to assure that all materials and completed construction work required for the Project conform to the Contract Documents.

Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the construction documents, the Contractor is fully responsible for developing and executing their own quality control program. The Contractor shall provide the City with written documentation of the quality control methods and procedures for review and acceptance prior to the start of the work.

The Contractor shall perform inspection, testing, and measurement of all items of work required by the plans and technical specifications, including those performed by subcontractors.

Review and/or testing of the materials and completed work by the City and/or their representative(s) does not relieve the Contractor of the performing quality control inspections/review of the Contractor's work and/or subcontractor's work. The City may elect to require the Contractor to repair or replace sections of the project that has not been installed in accordance with the Quality Control program.

In the cases where the quality control activities do not comply with the Contractor's Quality Control program or the Construction Documents, the City and/or their representative(s) may suspend all work. The suspension of work shall not alter the Project Construction Schedule and/or associated liquidated damages.

All required quality control activities shall be considered incidental to the project work. There will be no separate measurement and/or payment for this work.

END OF ARTICLE 1: PROJECT SPECIAL PROVISIONS - GENERAL REQUIREMENTS

ARTICLE 2: SPECIAL PROVISIONS (SP)

SP-01R, COMPREHENSIVE GRADING

1.0 DESCRIPTION

This item shall include all elements of work covered by the referenced NCDOT Specifications and the numbered Additional City Specifications provided herein.

NCDOT Specifications

200, "Clearing and Grubbing"
225, "Roadway Excavation"
235, "Embankment"
240, "Ditch Excavation"
250, "Removal of Existing Pavement"
260, "Proof Rolling"
340, "Pipe Removal"
412, "Unclassified Structure Excavation"
416, "Channel Excavation"
500, "Fine Grading, Sub-grade, Shoulders and Ditches"
545, "Incidental Stone Base"
560, "Shoulder Construction"
1530, "Abandon or Remove Utilities"

Additional City Specifications

1. Clearing and Grubbing: Clearing on this Project shall be performed to the slope stake line or the right-of-way or easement lines unless directed otherwise. The Contractor shall obtain permission from the Engineer prior to removing any trees in the easement areas.
2. Tree and/or Stump Removal and Disposal: as shown on the plans and any additional tree and/or stump removal identified by the Contractor's means and methods shall be included in this item. Trees to be removed shall be approved by the Engineer prior to removal.
3. Tree Protection: The Contractor shall provide tree protection as shown on the plans, including any pruning which shall be performed by a certified arborist in accordance with proper arboricultural standards, and any additional Tree Protection identified by the Contractor's means and methods shall be in accordance with the City "Landscape Construction Standards" Tree Preservation and Protection, Section 01000 and included in this item.
4. Removal and Disposal of Existing Infrastructure: concrete curb, sidewalk, miscellaneous concrete, asphalt, driveways, pads, slabs, walls, structures, catch basins, manholes, stream structure materials, etc. within the construction limits as shown on the plans and any additional infrastructure removal identified by the Contractor's means and methods shall be included in this item.
5. Property Access: All labor and materials required to maintain access to properties during construction as directed by the Engineer. Contractor to protect and maintain parking lot and curb free from damage. Contractor responsible for parking and curb repairs at own expense.
6. Existing Grade Control Adjustment: Relocation and adjustments of existing in-stream grade control structures as shown on the plans. All cutting and moving of logs or rocks for grade control structures should be included in this item.



7. Incidental Stone Base: Incidental Stone Base to be used under installation of new stream structures where subgrade conditions are deemed not suitable to provide adequate foundation for the structures. Type 2 geotextile may also be needed with use of Incidental Stone Base.

8. Construction Access Corridors: Access corridors shown on the plan are intended for ingress and egress of heavy equipment and transport of materials. Contractor shall access limits of disturbance not shown with an access corridor by non-mechanical means.

2.0 MEASUREMENT

There will be no separate measurement made for Comprehensive Grading.

3.0 PAYMENT

For the above-referenced NCDOT sections and numbered Additional City Specifications, there will be no direct measurement, payment or compensation, all cost incurred to complete the work as specified shall be included in the Lump Sum price bid for "Comprehensive Grading".

There will be no separate measurement or payment for the items listed or referenced in this specification.

Payment will be made under:

COMPREHENSIVE GRADING.....LS

SP-02, EARTHWORK, EXCAVATION, UNSUITABLE MATERIALS, AND BACKFILL MATERIALS

Version Date: 1/10/2020

Revision Date: MM/DD/YYYY by XXX

1.0 DESCRIPTION

Earthwork shall be performed to the lines and grades indicated on the plans. The work shall include excavation, furnishing, placement, compaction, and satisfactory disposal of all materials encountered within the limits of the Work necessary for the construction of the Project.

All excavated materials that are not required for the Project or are unsuitable for fills shall be considered as waste and shall be hauled off the site at the Contractor's expense.

2.0 MATERIALS

- Provide bedding material in accordance with Article 1016-3 for Class II, Type 1 or Class III, Type 1 or Type 2 select material.
- Provide backfill material in accordance with Article 1016-3 for Class II, (Type 1 for flexible pipe) or Class III select material.
- Provide foundation conditioning material in accordance with Article 1016-3 for Class V or VI select material.
- Provide foundation conditioning geotextile in accordance with Article 1056-2 for Type 2 geotextile.
- Provide borrow material in accordance with Article 1018.

3.0 MEASUREMENT AND PAYMENT

There will be no direct payment for earthwork, excavation, unsuitable materials, and backfill materials described in this special provision. Payment will be made at the contract unit prices for the various items covered by sections

226 Undercut Excavation, 300 Pipe Installation, 305 Drainage Pipe, 310 Pipe Culverts, SP-01 Comprehensive Grading, and SP-03 Borrow Excavation.

(A) Unsuitable Material

Unsuitable material shall be defined as any and all unsuitable materials regardless of its nature. Unsuitable Material not incorporated into the Project shall be removed, hauled, and disposed by the Contractor only as authorized by the Engineer. Stockpiled Unsuitable Material shall be disposed of no less than once per week.

Proposed Project Subgrade, other than Pipe Culvert Trench Subgrade

Unsuitable material **below** the proposed project sub-grade, including but not limited to below the invert of an open channel or bottom of detention facilities, shall be removed, measured, hauled, disposed of, replaced, and paid for under NCDOT Section 226, *Undercut Excavation*.

Unsuitable material **above** the proposed project sub-grade shall be removed, hauled, and disposed of at no additional cost to the City.

Proposed Pipe Culvert Trench Subgrade

Unsuitable material **below** the proposed project pipe culvert trench subgrade within the approved trench excavation limits for storm drainage pipe and storm drainage culvert (including but not limited to box culverts, oval pipe culverts and three-sided culverts/bridges) shall be removed, measured, hauled, disposed of, replaced, and paid for in accordance with Section 300-9 (B) *Foundation Conditioning Material* and Section 300-9 (C) *Foundation Conditioning Geotextile*.

Unsuitable material **above** the proposed pipe culvert trench sub-grade shall be removed, hauled, disposed of at no additional cost to the City.

(B) Bedding and Backfill

- Pipe (including round, elliptical, etc.)
 - There will be no separate measurement or payment for select bedding and select backfill material required in the installation of pipe as illustrated in NCDOT 300.01. All bedding and select backfill material will be included in cost of the installed pipe.
- Culvert (Box Culverts/Bends/Bottomless Culverts)
 - There will be no separate measurement or payment for bedding required in the installation of culverts as illustrated in Figure 2.1 of the *Precast Reinforced Concrete Culvert Special Provision* or as shown on the plans. All bedding material will be included in cost of the installed pipe or culvert.
 - Material needed for buried culvert inverts and channel inverts inside three-sided bridge/culverts shall be incidental to the cost of the culvert unless otherwise directed by the Engineer.

When local material meeting the requirements for the select bedding and backfill is approved for use by the Engineer, no deductions in the cost of pipe culvert will be made. Local material is defined as material generated on the project site or within the project limits.

Within the Existing or Proposed Roadway

- Pipe (including round, elliptical, etc.)
 - For pipe located within the existing or proposed roadway, including beneath the proposed curb and gutter or between road ditch lines, the Contractor shall use suitable material from the elevation of the select backfill material included in the cost of the installed pipe to the subgrade.
- Culvert (Box Culverts/Bends/Bottomless Culverts)

- For culverts located within the existing or proposed roadway, including beneath the proposed curb and gutter or between road ditch lines, the Contractor shall use suitable material from the elevation of the bedding included in the cost of the installed culvert to the subgrade.

When local material meeting the requirements for suitable material is approved for use by the Engineer, there will be no separate measurement or payment for the material incorporated into the completed and accepted Project.

Outside of the Proposed or Existing Roadway

- Pipe (including round, elliptical, etc.)
 - For pipe located outside the existing or proposed roadway, the Contractor shall use local suitable material from the elevation of the select backfill material included in the cost of the installed pipe to the finished grade or subgrade.
- Culvert (Box Culverts/Bends/Bottomless Culverts)
 - For culverts located outside the existing or proposed roadway, the Contractor shall use local suitable material from the elevation of the bedding included in the cost of the installed culvert to the finished grade or subgrade.

When local suitable material is not available to complete the backfill of the trench, the Contractor shall use borrow material in accordance with SP-03, *Borrow Excavation*.

Do not use *Borrow Excavation* material until all local suitable material has been incorporated into the Project. There shall be no measurement or payment made for borrow excavation material brought to the site at the Contractor's convenience.

(C) Other

No separate measurement or payment will be made for any other excavation, furnishing, placement, compaction or satisfactory disposal of material encountered within the limits of Work necessary for construction of the Project. All other earthwork shall be considered incidental to the Project and paid for in *Comprehensive Grading*, unless noted elsewhere in the Contract Documents.

SP-03, BORROW EXCAVATION

Version Date: 03/21/2016

Revision Date: MM/DD/YYYY by XXX

1.0 DESCRIPTION

The work covered in this special provision includes all elements of work covered in section 230 "Borrow Excavation" of the Standard Specifications with the following exception pertaining to payment.

2.0 MEASUREMENT

Measurement shall be made in accordance with the Standard Specifications, Section 230-5(A) In-Place Measurement or Section 230-5(B) Truck Measurement as directed by the Engineer.

3.0 PAYMENT

The quantity of Borrow Excavation, measured as provided above, will be paid for at the contract unit price per cubic yard for *Borrow Excavation*. When Borrow Excavation is used to replace soil that has been determined to be unsuitable by the Engineering Department due to moisture, poor soil composition, or other factors, the contract unit price for Borrow Excavation shall include all excavation, removal from site, and proper disposal of unsuitable soil.

The contract unit price for *Borrow Excavation* as described above will be full compensation for furnishing, transporting, handling, placing, compacting, and maintaining borrow material. Unless otherwise directed by the Engineer, there will be no separate payment for borrow material above the select bedding and backfill materials included in the cost of the installed pipe, which exceeds the following extents:



Storm Drainage

- Pipe
 - Horizontally – the outer diameter of the pipe plus three feet;
 - Vertically – from the top of the select backfill material to the ground line, as illustrated in NCDOT 300.01;
- Box Culverts/Bends/Bottomless Culverts
 - Horizontally – outer width of culvert or footer plus six feet (three feet each side);
 - Vertically – from the top of the bedding material or bottom of the structure to the ground line, as illustrated in Figure 2.1 of the *Precast Reinforced Concrete Culvert Special Provision*;

Structures

(Includes but not limited to: headwalls, drainage structures (catch basins, drop inlets, risers, etc.), flared end sections, retaining walls, etc.)

- Vertically – to the ground line elevation as shown on the plans or details;
- Horizontally – two (2) feet from each exterior surface (outer wall of the structure or footer whichever is further)

Material used for the contractor’s means and methods outside of these trench limits shall meet the material requirement and will be at the contractor’s expense.

Payment will be made under:

BORROW EXCAVATION **CY**

SP-04, EROSION CONTROL

Version Date: 02/21/2020

Revision Date: MM/DD/YYYY by XXX

1.0 DESCRIPTION

This item shall include all elements of work covered by the referenced NCDOT Specifications and the numbered Additional City Specifications provided herein.

NCDOT Specifications

- 1605, “Temporary Silt Fence”
- 1606, “Special Sediment Control Fence”
- 1607, “Gravel Construction entrance”
- 1610, “Stone for Erosion Control”
- 1615, “Temporary Mulching”
- 1620, “Temporary Seeding”
- 1622, “Temporary Slope Drains”
- 1630, “Construction and Maintenance of Silt Detention Devices”
- 1632, “Rock Inlet Sediment Trap”
- 1633, “Temporary Rock Silt Checks”
- 1634, “Temporary Rock Sediment Dams”
- 1635, “Rock Pipe Inlet Sediment Trap”
- 1636, “Temporary Stream Crossing”
- 1637, “Riser Basin”
- 1638, “Stilling Basin”
- 1639, “Special Stilling Basin”
- 1640, “Coir Fiber Baffle”
- 1650, “Wooded Area Cleanup”



- 1651, "Selective Vegetation Removal"
- 1660, "Seeding and Mulching"
- 1661, "Repair Seeding"
- 1662, "Supplemental Seeding"
- 1664, "Sodding"
- 1665, "Fertilizer Topdressing"
- 1667, "Specialized Hand Mowing"
- 1670, "Planting"

Additional City Specifications

1. Erosion Control: includes but is not limited to furnishing, installing, and maintaining silt fence, diversion ditches, rock inlet sediment traps, rock pipe sediment trap, silt sacks, all stone for erosion control, rock check dams, temporary wattle check dams with matting and optional PAM, block and gravel and inlet protection, catch basin inlet protection, temporary rock construction entrances, silt basins, and all other erosion control measures required by, the plans, current ordinances, project permitting, and the Contractor’s means and methods. The contractor shall remove all erosion control measures as directed by the Engineer.

2. Seeding and Mulching: all temporary and permanent seeding and mulching required to complete the project in accordance with the plans and specifications shall be included in this item. All work shall be in accordance with the City “Landscape Construction Standards” Seeding and Sodding Turfgrass Section 04200 and included in this item.

3. Erosion Control Matting: includes but is not limited to furnishing, installing, and maintaining temporary matting required for the project as required in the plans, current ordinances, project permitting, and the Contractor’s means and methods. Erosion Control Matting shall be used on all slopes steeper than 3:1. Matting may also be required in other areas as needed to stabilize the site and to maintain erosion control and/or as noted on plans.

2.0 MEASUREMENT

There will be no separate measurement made for Erosion Control.

3.0 PAYMENT

For the above-referenced NCDOT sections and numbered Additional City Specifications, there will be no direct measurement, payment or compensation, all cost incurred to complete the work as specified shall be included in the Lump Sum price bid incidental to “Erosion Control”.

There will be **no separate measurement or payment** for the items listed or referenced in this specification.

Partial payments will be made as follows:

- 25% of the lump sum price on the first partial payment estimate made after any work has been performed on the item of “Erosion Control”.
- 25% of the lump sum price on the first partial payment after work is 25% complete.
- 25% of the lump sum price on the first partial payment after work is 50% complete.
- 25% of the lump sum price on the first partial payment after work is 100% complete.

Payment will be made under:

EROSION CONTROL.....LS

Payment for the entire lump sum contract price for the item of *Contract Mobilization* will be made with the first pay request on the original contract.

Payment will be made under:

CONTRACT MOBILIZATIONLS

SP-05R, STEPPED OUTLET PROTECTION

Version Date: 05/22/2015

REVISION DATE: 09/14/2022 BY PNB

1.0 DESCRIPTION

The work covered by this section consists of furnishing, stockpiling, placing and maintaining approved boulders, stone, and filter fabric to be utilized to construct the Stepped Outlet Protection, as specified in the Contract Document or as directed by the Engineer. Stepped Outlet Protection structures are used to provide conveyance from proposed or existing outfalls to the main channel. They also provide energy dissipation for outfall discharges.

The quantity of the material used in the structures to be constructed will be affected by actual conditions that occur during the construction of the project. The type and quantity of this structure may be increased or decreased at the direction of the Engineer. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

2.0 MATERIALS

Boulders shall consist of flat-sided, durable field or quarry stone that is sound, hard, dense, angular, and resistant to the action of air and water, and free of seams, cracks, or other structural defects. The Contractor shall use stone pieces with a “shape factor” greater than two (length and width more than twice the thickness). The Contractor cannot use limestone, cut boulders, or concrete waste for stone.

The size (length, width and depth thickness) of the boulder material shall be as shown on the plans or as specified by the Engineer. Boulder Stone shall be approved by the Engineer.

Boulders for in-stream structures shall conform to their respective specifications as shown on the plans. Coarse Backfill shall meet the material requirements of NCDOT Section 1042. Coarse backfill material shall consist of durable field or quarry stone that is sound, hard, dense, slightly rounded, resistant to the action of air and water, and free of seams, cracks, or other structural defects. The Contractor shall use stone pieces with a “shape factor” less than two (length and width less than twice the thickness). The Contractor cannot use limestone or concrete waste for stone. Stone shall be approved by the Engineer.

#57 Stone shall meet the material requirements of NCDOT Section 1042.

Filter fabric for sealing structures shall meet the material requirements of NCDOT Section 1056 Geosynthetics.

3.0 METHODS

Structure installation may vary based on site conditions. Stepped Outlet Protection structures shall be installed after channel grade and bankfull channel geometry are established.

- a) Establish elevations of the proposed structure. The Contractor may install additional survey control, as needed, to complete the work in accordance with the Contract Documents.

Footer Boulders Installation

- a) Over-excavate streambank and the stream bed to a depth equal to the total thickness of the header and footer boulders. Bedding for the placement of the footer boulders shall be approved by the Engineer prior to placement.
- b) Place footer boulders in the trench prepared for the Stepped Outlet Protection. Footer boulders shall have direct surface contact with adjacent boulders. Review, survey (measure), and adjust the alignment and/or height of the footer boulders, as needed. Selecting boulders with similar thickness for the footers may assist with the ease of construction. The footers shall be reviewed by the Engineer prior to proceeding with the work.
- c) Install filter fabric per the Contract Documents. Typically, the fabric is draped over the top of footers, down the back face of the footer boulders and across the area of over-excavation. Fabric reaching the excavated stream bed / toe of bank soil face may be folded and/or trimmed, in accordance with the Contract Documents. The fabric installation shall be reviewed by the Engineer prior to proceeding with the work.
- d) Place fill stone on top of the filter fabric and between the footer boulders and the excavated/constructed streambank soil. Place fill stone between gaps between footer boulders and bring level with the top surface of the footer boulders. The fill stone should provide a base for supporting overlying header boulder. The fill stone shall be #57 stone. The fill stone shall be reviewed by the Engineer prior to proceeding with the work.

Header Boulders Installation

- a) Place the header boulders on top of and slightly back from the edge of the footer boulders (such that the header boulders rest partially on top of a footer boulder or the fill stone). Header boulders shall be placed so that they span the seams of the footer boulders. Header boulders shall have direct surface contact with adjacent boulders, free of gaps. Review, survey (measure), and adjust the alignment and/or height of the header boulders, as needed. Selecting boulders with similar thickness for the headers may assist with the ease of construction.
- b) Place fill stone between the header boulders and the excavated/constructed streambank soil. Place fill stone between gaps between header boulders and bring level with the top surface of the header boulders. The fill stone should provide a base for supporting overlying header boulder. The fill stone shall be #57 stone. The fill stone shall be reviewed by the Engineer prior to proceeding with the work.
- c) Repeat steps a and b until the stepped outlet protection is brought up to the invert of the pipe or channel outfall.
- d) After installing all of the stepped outlet protection, inspect the structure and trim/cut any loose and/or visible fabric.
- e) Finish grade the adjacent streambed and channel banks to provide a smooth even grade transition between boulders and the existing and/or proposed ground surface.

In locations where exposed bedrock and/or other existing feature extends to and/or within the limits of the proposed work, the stepped outlet protection installation shall be field adjusted to incorporate the bedrock/existing feature, into the finished work. The Engineer shall be contacted as soon as the presence of bedrock and/or other existing feature is field identified, to determine the appropriate method of incorporation. Site conditions may require slight deviation from the plan and shall be approved by the Engineer.

4.0 MEASUREMENT



The quantity of stepped outlet protection shall be measured in cubic yards of boulders incorporated in “Stepped Outlet Protection” completed and accepted into the final work. Truck tickets will be used to document tons of boulders used for Stepped Outlet Protection.

No separate measurement of materials shall be made under this item for #57 stone, fabric, and/or other incidental items.

5.0 PAYMENT

The quantity of stepped outlet protection shall be paid in cubic yards of boulders incorporated in “Stepped Outlet Protection” completed and accepted into the final work.

No separate measurement of materials shall be made under this item for #57 stone, fabric, and/or other incidental items. Stepped Outlet Protection will be paid under:

STEPPED OUTLET PROTECTION.....CY

ARTICLE 3: PROJECT SPECIAL PROVISIONS - LANDSCAPE (SPL)

SPL-01, LIVE STAKES

Version Date: 5/14/2021

Revision Date: MM/DD/YYYY by XXX

1.0 DESCRIPTION

The work covered in this special provision includes preparation, furnishing equipment, materials, and labor necessary to install and maintain live stakes on “finished” stream banks as shown on the plans and/or as directed by the City.

Live stakes shall be installed in accordance with the various stream bank stabilization techniques described in the Contract Documents.

All planting shall be executed during the dormant season for each species (generally November 15 thru March 15).

2.0 MATERIALS

Live stake materials shall consist of materials specified in the Contract Documents, or if not specified, then shall be made up of the species and percentages in the table below.

Live stakes shall measure one-half inches to two inches (1/2” – 2”) diameter, two to three feet (2’ – 3’) in length, angled on the bottom and cut flush on the top, with buds oriented upwards. Live stakes shall be living based on the presence of young buds and green cambium. All side branches shall be cleanly trimmed, so the cutting is a single stem. They shall be cut at a 45° angle on the basal end and cut flat on the other end. The basal end is intended as the end to take root and shall be the end installed in the ground. Live stakes shall not be harvested after March 15 or before November 15.

BOTANICAL NAME	COMMON NAME	PERCENTAGE
<i>Cornus amomum</i>	Silky dogwood	40
<i>Salix sericea</i>	Silky willow	20
<i>Sambucus canadensis</i>	Elderberry	40

Apply the Live Stakes as shown on the Planting Plan and Details or as directed by the Engineer.

3.0 SUBMITTALS

Furnish a copy of tags used to identify cuttings after harvest and during transport or any tickets, tags, or manifests for purchased materials, as applicable based on the Contractor’s method of live stake procurement/ harvesting. Provide the following documentation:

- 1) The Contractor may decide to harvest live cuttings or purchase live cuttings and/or pre-made live stakes. If the Contractor decides to harvest their own material:
 - a) A list of live cutting harvest sites shall be provided ten days prior to beginning the Work.
 - b) A copy of the signed written agreement and applicable correspondence between the harvest site property owner and Contractor shall be provided ten days prior to beginning the Work. At minimum, the signed agreement shall:
 - i) Grant permission to harvest.

- ii) Specify the requirements of access/egress.
 - iii) Specify the use of and condition in which the harvesting site is to be left.
 - iv) Acknowledge that the Contractor shall be solely responsible for activities on the harvesting site and shall hold the Owner and any other parties harmless.
 - v) Certify that the proposed cutting material is insect and disease free.
- c) Provide a copy of any applicable permits from regulatory agencies for the harvest site.
- 2) If the Contractor decides to purchase live cuttings and/or pre-made live stakes, provide the name and location of and contact information for the supplier. Suppliers must provide all of the written information required of the Contractor.

4.0 METHODS

Live stakes shall be installed by a professional certified by the NC Landscape Contractors' Registration Board or an individual with a B.S. in Biology or a closely related field with successful planting experience. Live stakes shall be installed into the ground using a dead blow hammer. They shall be installed so that approximately one-fifth of the stake protrudes with at least two buds exposed from the finished ground elevation. On the sloped areas, they shall be placed at right angles to the slope face. In cases where the ground is hard, a pilot hole may be made to assist in inserting the live stake. The Contractor may use a half-inch metal rod or other means acceptable to the Engineer for this purpose. The intent of this requirement is to maintain firm soil/stake contact after the live stake is installed. The rod must be removed carefully and may not be rotated to enlarge the hole.

Species selection may be adjusted depending on availability. Substitute species must be approved by the Engineer prior to installation. All final locations and configurations shall be determined in the field by the Engineer.

The stakes shall be installed per the spacing requirements shown on the plans. Live stake applications shall follow application rates shown in details.

No planting shall be done in soil that, in the opinion of the City, is too wet, too dry or not properly conditioned as provided in these specifications. No planting shall be done on channel banks that have not been seeded and stabilized with erosion control matting, unless otherwise directed by the City.

Materials shall be installed the same day as prepared or stored in a refrigerated area that has been kept moist for no longer than ten (10) calendar days.

Protect plants at all times from sun, drying winds, and frost. Plants that cannot be planted immediately on delivery shall be kept well protected from winds and frost. Bundles of harvested live material should be kept with cut ends submerged in water to keep cut ends moist at all times. Care shall be taken to keep bundles moist during transportation from the harvest site to the planting site. Live cuttings that appear to be dried out or damaged during transportation will not be accepted. Rejected live cuttings may be marked by the City.

5.0 WARRANTY

All live stakes installed by the Contractor shall be assessed by the Engineer or representative thereof at the end of the same planting season they were installed. One hundred percent of the live stakes must be installed correctly and still be alive at the time this assessment is completed. If dead plant material is found, the Contractor is responsible for replacing that material before the completion of that planting season (**March 15**). At the completion of one full growing season following planting, all live stakes installed by the Contractor shall be assessed by the



Engineer. Eighty percent (80%) of the live stakes must survive after one full growing season. If the Contractor does not meet this requirement, then all dead plant material shall be removed and replanted during the next planting season. The new replacement live stakes shall have the distal end marked with yellow paint and will also be under warranty and be assessed at the conclusion of the next full growing season. Replacement of live stakes under warranty is required to have 80% survival of the original planting at the end of any new warranty period. The Engineer, or representative thereof, shall have the option to do a 100% count or to substitute a method of random systematic sampling that counts survival on 25% of the planted area and have these results of this sampling method represent the actual estimate of survival for warranty purposes.

The Contractor shall be responsible for furnishing equipment, materials, labor, incidentals and water to maintain plant survival in accordance with these specifications during the construction contract and during the warranty period.

The Contractor shall be responsible for traffic control through the life of the project and warranty period.

6.0 MEASUREMENT

This item will be measured by each unit furnished, properly installed and accepted by the Engineer, including all labor, machinery, materials, maintenance, hauling, preparing, harvesting, and installing of the item to complete the work in an acceptable manner. No payment shall be made for improperly installed stakes, i.e. mushroomed or split ends. Live stakes used for construction of "Vegetated Geo-grid with Root Wads" are considered incidental and not measure for payment under this special provision.

7.0 PAYMENT

Payment will be full compensation for all work covered in this special provision, including, but not limited to installation, harvesting, preparation, hauling, staking, repair, replacements, maintenance, and for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the work.

Payment will be made under:

LIVE STAKES EA

SPL-02, RIPRIAN SEEDING

Version Date: 5/14/2021

Revision Date: 3/1/2023 by PNB

1.0 DESCRIPTION

This work shall consist of furnishing and installing all herbaceous seed for the riparian zones as specified in the Construction Plans, or as directed by the Engineer.

Prior to start of work on this item, the Contractor shall submit a proposed seeding schedule, including the source and content of the seed mix, to the Engineer for review. No work shall be performed until the Engineer approves this schedule.

2.0 MATERIALS

Seed:

Seed shall consist of seed varieties specified in the composition and planting schedules on the plans for the "Riparian Seed" planting mix.



Seed shall be certified that the Pure Live Seed (PLS) percentage is equal to or greater than that which is specified on the Plant Schedules. If the PLS is less than specified, the Contractor shall increase the seeding rate to compensate for the PLS difference at his/her own expense. Seed shall be delivered to the project site in the unopened manufacturer’s packaging. Accompanying the seed and attached to the bag will be the manufacturer’s tag stating suppliers name and contact information, seed testing date, percentage of germination, PLS and any noxious or other weed content. If the manufacturer does not normally attach a bag tag, a seller’s invoice with the same information shall be furnished to the City representative.

All seed ecotypes must be derived from the North Carolina Piedmont Region and no further than 200 miles from Charlotte, NC.

All seed and seed varieties shall be free from State and Federal prohibited noxious weed seeds and the following:

Annual bluegrass	Corn cockle	Spurred anoda
Bermuda grass	Dodder	Wild garlic
Bindweed	Giant foxtail	Wild onion
Cocklebur	Horse nettle	

Mulch:

Seed mulch shall consist of straw or wood cellulose mulch.

Water:

Water used in the establishment or caring of plants and seed shall be free from any substance that is injurious to plant life.

Fertilizer:

The Contractor shall use non-petroleum-based fertilizers. Application rates of fertilizers shall be 2 lbs/1000 square feet of actual nitrogen in a 20-10-5 product or approved substitute of similar ratios.

Limestone:

Application rates of limestone shall be 1-1½ tons/acre.

3.0 METHODS

The seed mixes are specified on the composition and planting schedules. Areas not disturbed shall not be seeded.

The Contractor shall test the soil to ensure the proper pH and nutrient balance to support the growth of species listed on the landscape plan. If the soil does not meet the criteria, then the Contractor shall amend the soil as needed with fertilizer and/or limestone to achieve the proper balance.

All areas to be seeded shall conform to the finished grades as specified on the plans and be free of all weeds, trash, debris, brush, clods, loose rocks and other foreign materials larger than three inches (3”) in diameter or length that would interfere with seeding. All gullies, washes or disturbed areas that develop subsequent to final dressing shall be repaired and stabilized prior to seeding.

Seeding may be performed at any time during the year with the only exception when the temperature is 32°F (0°C) or lower.

Seeding shall be accomplished by using a broadcast spreader, or as indicated by the Engineer. The Engineer, prior to Bid Submittal, must approve any alternative seeding method. All seeding equipment shall be calibrated before application to the satisfaction of the Engineer so that the material is applied accurately and evenly to avoid misses and overlaps. Seed installed by a broadcast spreader shall be capable of placing seed at the specified rate.



Seed shall be applied within the top one quarter inch (¼”) of the soil in two different directions. The Contractor shall maximize the seed/soil contact by first loosening the soil with a cultipacker, other similar equipment, or by dragging the surface with chain link fence. After broadcasting the seed, the soil shall be gently firmed around the seed with a smooth roller.

Immediately after seeding, the site shall be watered lightly, but thoroughly, so that the top four inches (4”) of soil are saturated. Watering shall not occur between 10am and 2pm between April 15 and September 15.

The Contractor shall mulch and tack all seeded areas within 24 hours after seeding.

Final cleanup shall be the responsibility of the Contractor and consist of removing all trash and materials incidental to the project and disposing of them off-site.

4.0 WARRANTY

At the completion of one full growing season, riparian seeded areas will be assessed by the Engineer. Eighty percent of the surface area planted must be covered with healthy, established riparian vegetation. No single bare area shall exceed 9 square feet. If the riparian seeded areas do not meet this requirement as determined by the Engineer, the Contractor shall scarify the surface to a depth of one inch (1”) or more, have fertilizer added to meet soil test requirements, and then reseed all bare areas at the Contractor’s expense. The newly seeded areas will also be under warranty, and be assessed at the conclusion of the next full growing season

5.0 MEASUREMENT

The quantity of seeding measured will be the actual number of acres measured along the surface of the ground over which the materials are installed and accepted by the Engineer. Any fertilizer and/or limestone required to achieve proper soil pH and nutrient balance will be considered incidental to planting.

6.0 PAYMENT

Payment will be full compensation for all work covered by this section including but not limited to furnishing all of the materials for the seeding operations.

Payment will be made under:

RIPARIAN SEEDING.....SY

END OF ARTICLE 3: PROJECT SPECIAL PROVISIONS – LANDSCAPING

ARTICLE 4: PROJECT SPECIAL PROVISIONS - STREAM RESTORATION AND WETLANDS (SPSRW)

SPSRW-01, TIMBER MAT

Version Date: 05/22/2015

Revision Date: MM/DD/YYYY by XXX

1.0 DESCRIPTION

The work covered by this special provision consists of all items related to installing timber mats for construction access. Construct and maintain construction access at locations shown on the Contract Documents or as directed by the Engineer for the duration of the project work. The locations shall be field adjusted based on site conditions, emphasizing preservation of existing vegetation and minimizing impacts to wet areas.

The quantity of structures to be constructed will be affected by actual conditions that occur during the construction of the project. The type and quantity of this structure may be increased or decreased at the direction of the Engineer. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

2.0 MATERIALS

Timber mats shall be made of sawn, non-treated, hard wood (typically oak) timbers, which run the entire length of the mat. Timber mats are identified as either "Standard" or "Heavy". Standard timber mats are approximately 18 to 20 feet in length, four feet wide, and 8 inches thick, with steel connection rods typically every four feet. Heavy timber mats are approximately 30 feet in length, four to five feet wide, and 12 inches thick, with steel connections rods typically every seven feet. Timber mats may have attached cables to assist with transport.

Timber mats shall be clean (free of soil, debris, chemicals, and vegetation), solid (hard) and visibly free from decay, breakage, or other damage. A representative of the City may reject any timber mat. Timber mats rejected by the City may be marked with "temporary" marking paint and shall be removed from the site.

In the case of a fuel and/or fluid spill/leak, the Contractor and the Engineer shall inspect the adjacent timber mats for petroleum contamination. Any timber mats contaminated by the spill/leak shall be marked with temporary marking paint and removed immediately to the project staging area(s), the soil and vegetation below the timber mat(s) shall be inspected for contamination. If the ground beneath the removed timber mats is "clean" the timber mats will be replaced with "new" mats. If the ground is contaminated, remove the contaminated soil from the project site and dispose of it properly at no additional cost to the City.

Contaminated timber mats shall be removed from the project site and thoroughly cleaned before returning to the site. Upon request, provide a copy of the cleaning procedures and/or products.

Filter fabric for timber mat access shall meet the material requirements specified in the "Filter Fabric" section.

3.0 METHODS

Timber mats shall be placed and used in any area where access is required beyond the limits of an existing road.

Maintain all access roads, including replacing timber mats as needed for the duration of the project.

Tree and vegetation removal by the Contractor and/or sub-Contractors shall be minimal and limited, as indicated in the Contract Documents. Prior to the installing the Timber Mat Access road, identify (flag) all trees and/or shrubs to be removed. Flagged vegetation shall be reviewed and approved by the City. If during the execution of the project work additional trees and/or shrubs must be removed, flag the vegetation for review and approval by the City.

Access Roads

Once an access road alignment has been accepted by the City, hand cut field identified trees and/or shrubs to within six feet of the surface of the ground, for the width of the access area. All cut brush and/or tree branches and trunks shall be left on the surface of the ground.

Place timber mats directly on top of the cut vegetation, stumps and ground cover. Do not disturb the surface of the ground and/or the existing root mat during installation of the timber mats.

At the location(s) shown on the plans and/or as field determined by the Engineer, begin placing timber mats width-to-width. Once the length of the road is beyond the reach of the Contractor's equipment, any extension of the timber mat road shall be completed by equipment sitting on previously installed mats. All equipment access is limited to the installed timber mats. Additional timber mats may be placed adjacent to the access road, for vehicle staging, passing, and other construction activities.

Concentrated Flow Areas

In areas of concentrated flow (swales, draws, ditches, etc.) install timber mats width up to and immediately beyond the area of concentrated flow. Install additional timber mats length-wise to span the flow. Do not disturb the banks or vegetation within the concentrated flow area.

Determine if the installed timber mats are capable of providing safe access based on span length, height, weight and size of equipment, and type of equipment (i.e. on-road trucks, off-road trucks, tracked vehicles, etc.). Heavy timber mats may be needed based on the site conditions and equipment. If the Contractor is unable to span the concentrated flow area with a single timber mat length, then notify the City and develop an alternative plan for access.

Retire all access roads and remove all timber mats, timbers, bolts, cables, etc., upon completion of the project work and re-establish vegetation in accordance with the Contract Documents.

4.0 MEASUREMENT

The quantity of timber mat access to be paid for shall be the actual number of square feet of "Timber Mat Access", installed. All measurement for timber mat access shall be made horizontally along the surface of the installed mats.

There shall be no separate measurement for the timber mat concentrated flow access.

There shall be no separate measurement for "Standard" or "Heavy" timber mat access.

There shall be no separate measurement for timber mats that are installed for equipment staging, passing, removed and/or re-installed.

5.0 PAYMENT

The work covered by this section shall be paid for at the contract per square foot price for "Timber Mat Access". Such price shall be full payment for all work covered by this specification including all materials and work required for acceptance.

There will be no payment for the removal of timber mat materials from the job site or the disposal of unsuitable/worn-out timber mats.

Payment will be made under:

TIMBER MATSF

SPSRW-02R, SILL, LOG

Version Date: 1/28/2022

Revision Date: 09/30/2022 by PNB

1.0 DESCRIPTION

The work covered by this section consists of furnishing, stockpiling, placing and maintaining approved stone, boulders, logs, and filter fabric to be utilized to construct the log sill, as specified in the Contract Document or as directed by the Engineer. Sills are used to provide grade control and improve aquatic habitat.

Sills extend perpendicularly across the streambed in a relatively straight line. The structure may be used alone or in combination with a constructed or variable riffle. The structure invert may be set slightly lower in the center to provide a thalweg and to match the typical section dimensions.

The quantity of structures may be adjusted during construction due to site conditions and at the direction of the Engineer. The type and quantity of this structure may be increased or decreased at the direction of the Engineer. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

2.0 MATERIALS

Backfill Material shall consist of a well-mixed gradation of, stone aggregate, rip rap, earth, and wood/mulch. Earth material shall be sourced on site from stockpiled materials resulting from bank and/or channel bed excavations from channel construction activities. Earth material from channel bed excavation is preferable for well-mixed gradation placed in the channel and bank(s). Wood/mulch material shall include small logs (less than 1” in diameter), brush, and woody shrubs and shall be sourced on site from stockpiled materials resulting from other construction activities.

The type, size and gradation of the Backfill Material shall be specified by the Engineer to be mobile or non-mobile as the conditions in the channel warrant, and in accordance with the construction documents.

Stone aggregate and rip rap backfill material shall meet the material requirements of NCDOT section 1005 General Requirements for Aggregate and NCDOT section 1042 Rip Rap Materials.

Stone Backfill Material shall consist of durable field or quarry stone that is sound, hard, dense, slightly rounded, resistant to the action of air and water, and free of seams, cracks, or other structural defects. **The Contractor cannot use limestone or concrete waste for stone.**

Logs must be from a hardwood species, relatively straight, 8 to 12 inches in diameter along their entire length and shall meet the material requirements specified in the Contract Documents. All limbs and branches shall be removed from the log. Sources for logs shall include trees removed due to construction activities, logs removed from existing structures as shown on the plans, or off-site timber. All logs shall be relatively solid (hard) and free of visible rot and/or animal damage.

Boulders shall consist of flat-sided, durable field or quarry stone that is sound, hard, dense, angular, and resistant to the action of air and water, and free of seams, cracks, or other structural defects. The Contractor shall use stone pieces with a “shape factor” greater than two (length and width more than twice the thickness). **The Contractor cannot use limestone or concrete waste for boulders.** Boulders shall be approved by the Engineer.

The size (length, width and depth (thickness)) of the boulders shall be as specified by the Engineer in accordance with the construction documents.

If needed, #3 Rebar shall meet NCDOT section 1070 Reinforcing Steel.

Filter fabric for sealing structures shall meet the Type 2 material requirements of NCDOT Section 1056 Geosynthetics.

Galvanized steel roofing nails of durable quality with an umbrella head shall be used to fasten filter fabric to the header/footer logs.

3.0 METHODS

Structure installation and channel grading sequences may vary based on structure function and design. Grade control structures, such as log sills, shall be installed as grading operations progress downstream.

- 1) Establish elevations of the proposed structure. The Contractor may install additional survey control, as needed, to complete the work in accordance with the Contract Documents.
- 2) Over-excavate/trench the stream bed to a depth equal to the total thickness of the log(s) plus backfill material.
- 3) Place log(s) in the trench prepared for the sill. Review, survey (measure), and adjust the alignment and/or height of the sill logs, as needed. The log shall extend the entire design length of the sill plus the length needed to provide anchoring into the stream bank. The log(s) shall be reviewed by the Engineer prior to proceeding with the work.
- 4) Install filter fabric per the Contract Documents. Nail filter fabric to the upstream side of the log(s) as shown in the detail. Nails shall be below finished grade and spaced at one-foot (1-ft) intervals horizontally. Drape filter fabric over the upstream side of the log(s), down the back face of the sill and across the area of over-excavation/trenching, extending three to four inches (3" – 4") below grade. Fabric reaching the excavated soil face may be folded and/or trimmed, in accordance with the Contract Documents. There shall be no visible, loose ends or unsecured filter fabric on the completed work.
- 5) Place Backfill Material on top of the filter fabric and between the upstream side of the log(s) and the excavated bank soil face and between the upstream side of the log(s) and the excavated streambed soil face. The Backfill Material shall be level with the top surface of the log. Place Backfill Material downstream of the Log Sill for scour protection as shown in the Construction documents. The Backfill Material shall be reviewed by the Engineer prior to proceeding with the work. After installing all of the Backfill Material, inspect the structure and trim/cut any loose and/or visible fabric.
- 6) Finish grade the adjacent streambed and channel banks to provide a smooth even grade transition between project structure components (arms, sills, inverts, floodplain sills, etc.) and the existing and/or proposed ground surface. Drops over log sills must not exceed 0.1' without prior approval from the Engineer.

Based on the size of the stream and the size (length and diameter) of the log(s), a header/footer log combination meeting all other material requirements may be used in lieu of a single log with the Engineer's prior approval. For header/footer log combination installations, place the header log on top of and slightly behind the footer log. Connect/pin the header and footer log together using #3 rebar or approved equivalent. The header log shall extend the entire design length of the sill plus the length needed to provide anchoring into the stream bank. The footer and header logs shall be reviewed by the Engineer prior to proceeding with the work.

In locations where exposed bedrock and/or other existing feature extends to and/or within the limits of the proposed work, the log sill installation shall be field adjusted to incorporate the bedrock/existing feature into the finished work. The Engineer shall be contacted as soon as the presence of bedrock and/or other existing feature is field



identified to determine the appropriate method of incorporation. Site conditions may require slight deviation from the plan and shall be approved by the Engineer.

In locations where notching of existing logs is proposed, the Contractor shall notch the existing log at the proposed width and depth. Cuts shall be made at an angle of 45 degrees. The notch should be level and free from tears and protrusions.

4.0 MEASUREMENT

The quantity of log sill to be paid for shall be the actual number of linear feet of "Log Sill" completed and accepted into the final work, as measured along the centerline surface of the sill.

No separate measurement of materials shall be made under this item for footer boulders, backfill material, fabric, and/or other incidental items.

5.0 PAYMENT

The work covered by this section shall be paid for at the contract per linear foot price for "Log Sill". Payment will be full compensation for all work covered in this special provision, including, but not limited to grading, installation, adjusting, notching, excavating, placing backfill, maintaining the feature through acceptance, and for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by the Engineer.

There shall be no separate payment for furnishing trees meeting the requirements of this specification.

No separate payment shall be made for subsidiary items.

Payment shall be made under:

SILL, LOGLF

SPSRW-03, PUMP AROUND OPERATION

Version Date: 8/3/2021

Revision Date: MM/DD/YYYY by XXX

1.0 DESCRIPTION

Pump around operation includes all work necessary for the installation and maintenance of the pump around operation. This specification is required for *continuous natural stream base flow* sustained between precipitation events, which is defined as base flow herein. Work shall be performed in the dry by pumping base flow around project work area(s) for sediment and erosion control purposes as may be necessary or directed by the Engineer and to conform to the plans, specifications, details, permits, local laws, state laws, federal laws, and the Charlotte Land Development Standards where applicable.

The pump around operation shall provide a passageway for the base flow around the storm drainage work area(s). This pump around operation is for storm drainage work only and should not be considered for use with other construction activity such as sanitary sewer bypass pumping. Storm drainage work may include but is not limited to, removal and/or installation of pipe culvert, box culvert, bottomless pipe arch or culvert; stream channel improvement; or stream channel restoration. Contractor is responsible to maintain all active storm drainage systems and/or overland conveyance, including during rain events.

2.0 METHODS AND MATERIALS

Pump around operation methods, measures, materials, and works shall include, but are not limited to, the following:

Pump Around Operation System:

Pump Around Pump – A silent or quiet-rated (70db at 25 feet) pump(s), located *upstream* of an Impervious Dike shall be used to convey the base flow around the working area(s) during storm drainage work. The pump shall be contained inside a cased pump well, and filter stone shall surround the casing to prevent the intake of sediment fines. The intake for the drain mechanism should be located near the top of the water column unless otherwise specified by the Engineer. The pump system shall include temporary flexible hose in sufficient length to pump the water from the upstream end of the working area(s) to the downstream end at the Temporary Stabilized Outlet.

Dewatering System:

Dewatering Pump – A silent or quiet-rated (70db at 25 feet) pump(s) located *within* the limits of the working area shall be used to dewater the working area of any groundwater or infiltration in order to perform storm drainage work in the dry. The pump(s) include temporary flexible hose in sufficient length to pump and dewater from the working area to the Special Stilling Basin.

Temporary Stabilized Outlet - Shall be used in accordance with the plans and detail to control the effluent from all pump around operation measures, unless native streambed stone material is deemed suitable by designer at discharge location.

Storm water conveyance - Contractor is responsible for safely conveying storm water runoff resulting from precipitation events at all times including when installing storm drainage work in an existing or new alignment. During periods of dormant stream work and/or storm drainage culvert activity, Contractor shall provide temporary tie-ins, diversion ditches, or other means and methods to safely convey base flow and storm water runoff from precipitation events.

Restoration – Contractor shall restore working area to existing conditions or as required by the plans and permits. This shall include but not limited to removing, disposing, hauling, and restoring area where pump around and dewatering pumps were installed, temporary stabilized outlets, temporary flexible hose, and all other incidentals impacted by the pump around operation.

3.0 SUBMITTALS

Prior to starting pump around operations, Contractor shall submit all necessary specifications of pumps and associated materials to be used for the pump around and dewatering portions of work for review and approval by the Engineer. This shall include, but not limited to, an overall plan indicating specific locations of pumps, intakes and discharges, impervious dikes, and special stilling basins; size, quantity, noise specifications of pumps - pump well casing detail, temporary stabilized outlet material, flexible hose size and material; and surface runoff from rain event plan showing locations of temporary tie-in and/or diversion ditches needed to control storm flow during rain events. Contractor will be required to continuously maintain the systems and protect the working area(s) and surrounding structures subject to flooding.

4.0 MEASUREMENT

Measurement will be made as described below:

The Pump Around Operation specified under this Section shall be measured at the contract unit price per day. No separate measurement of materials will be made under this item. The Dewatering System is incidental and will not be measured under the Pump Around Operation.

Any pumping required that totals four (4) hours or more in a single calendar day will constitute a day of pumping and will be paid for at the contract unit price. Pumping for less than four (4) hours in a single calendar day will be considered incidental to the cost of the work. No additional payment will be made.

Impervious Dikes will not be measured under this section but will be measured in accordance with the *Impervious Dike* Special Provision.

Special Stilling Basins will not be measured under this section but will be measured in accordance with the *Special Stilling Basin* Special Provision.

5.0 PAYMENT

The payment will be made at the contract unit price per day for “Pump Around Operation.” Such payment will be full compensation for all elements of work required in accordance with the special provision including, but not limited to, furnishing all labor, materials, equipment, supplies, supervision, tools; performing all work necessary for the installation, maintenance, and removal of pump equipment in conjunction with storm drainage work, stream restoration/stabilization construction, culvert installation; furnishing project submittals; and other incidentals necessary to complete all work referenced herein. Payment shall only be made on calendar days the Contractor is actively progressing with storm drainage work which necessitates the pump around operation. Pump around operation used by the Contractor while not actively progressing with storm drainage work shall be at their own expense.

The Dewatering System is incidental to the Pump Around Operation and no separate payments will be made.

Impervious Dikes shall be paid separately in accordance with *Impervious Dike* Special Provision.

Special Stilling Basin shall be paid separately in accordance with *Special Stilling Basins* Special Provision.

Payment will be made under:

PUMP AROUND OPERATION.....DY

SPSRW-04, RIFFLE, ANGLED LOG

Version Date: 1/28/2022

Revision Date: MM/DD/YYYY by XXX

1.0 DESCRIPTION

The work covered by this section consists of furnishing, stockpiling, placing and maintaining approved stone, boulders, earth, wood material, logs, mulch, and filter fabric to be utilized to construct the angled log riffle, as specified in the Contract Document or as directed by the Engineer. Angled log riffles are structures used in relatively straight, high gradient stream-type channels to create a step-pool channel. These structures are used to prevent channel incision and provide habitat.

The quantity of structures may be adjusted during construction due to site conditions and at the direction of the Engineer. The type and quantity of this structure may be increased or decreased at the direction of the Engineer. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

2.0 MATERIALS

Backfill Material shall consist of a well-mixed gradation of, stone aggregate, rip rap, earth, and wood/mulch. Earth material shall be sourced on site from stockpiled materials resulting from bank and/or channel bed excavations from channel construction activities. Earth material from channel bed excavation is preferable for well-mixed gradation placed in the channel and bank(s). Wood/mulch material shall include small logs (less than 1” in diameter), brush, and woody shrubs and shall be sourced on site from stockpiled materials resulting from other construction activities.

Stone aggregate and rip rap backfill material shall meet the material requirements of NCDOT section 1005 General Requirements for Aggregate and NCDOT section 1042 Rip Rap Materials.

Stone Backfill Material shall consist of durable field or quarry stone that is sound, hard, dense, slightly rounded, resistant to the action of air and water, and free of seams, cracks, or other structural defects. **The Contractor cannot use limestone or concrete waste for stone.**

The type, size and gradation of the Backfill Material shall be specified by the Engineer to be mobile or non-mobile as the conditions in the channel warrant, and in accordance with the construction documents.

Logs must be from a hardwood species, relatively straight, 8 to 12 inches in diameter along their entire length and shall meet the material requirements specified in the Contract Documents. All limbs and branches shall be removed from the log. Sources for logs shall include trees removed due to construction activities, logs removed from existing structures as shown on the plans, or off-site timber. All logs shall be relatively solid (hard) and free of visible rot and/or animal damage.

Boulders shall consist of flat-sided, durable field or quarry stone that is sound, hard, dense, angular, and resistant to the action of air and water, and free of seams, cracks, or other structural defects. The Contractor shall use stone pieces with a "shape factor" greater than two (length and width more than twice the thickness). **The Contractor cannot use limestone or concrete waste for boulders.** Boulders shall be approved by the Engineer.

The size (length, width and depth (thickness)) of the boulder material shall be as specified by the Engineer in accordance with the construction documents.

Filter fabric for sealing structures shall meet the Type 2 material requirements of NCDOT Section 1056 Geosynthetics. Galvanized steel roofing nails of durable quality with an umbrella head shall be used to fasten filter fabric to the logs.

Coir fiber matting shall meet the material requirements of SPSRW-06 Erosion Control Matting.

3.0 METHODS

Structure installation and channel grading sequences may vary based on structure function and design. Grade control structures, such as angled log riffles, shall be installed as grading operations progress downstream. Begin construction of the angled log riffle structure from the proposed downstream end of the structure and progress upstream with the increase in elevation until the structure is completed and tied into the specified upstream elevation.

Prior to construction of the structure, establish elevations at each angled log and design pool invert. The Contractor may install additional survey control, as needed, to complete the work in accordance with the Contract Documents.

- 1) Over-excavate/trench the stream bed to a depth equal to the total thickness of the angled logs.
- 2) Place the angled log(s) in the trench excavated at the desired angle. Review, survey (measure), and adjust the alignment and/or height of the angled log, as needed. The angled log shall extend the entire design length plus the length needed to provide anchoring and a smooth transition into the stream bank. The angled log shall be reviewed by the Engineer prior to proceeding with the work.
- 3) Install an anchor boulder against the angled log at the upstream and downstream ends prior to backfilling. The boulder shall be installed such that the face of the streambank is smooth.
- 4) Install filter fabric per the Contract Documents. Nail filter fabric to upstream side of the log(s). Nails shall be below finished grade and spaced at one-foot (1-ft) intervals horizontally. Drape filter fabric over the



upstream side of the log(s), down the upstream face of the sill, extending three to four inches (3" – 4") below grade. Fabric reaching the excavated stream bed/bank soil face may be folded and/or trimmed, in accordance with the Contract Documents. The fabric installation shall be reviewed by the Engineer prior to proceeding with the work.

- 5) Place Backfill Material on top of the filter fabric and between the upstream side of the log and the excavated stream bed/bank soil face. The Backfill Material shall be level with the top surface of the log. After installing all of the Backfill Material, inspect the structure and trim/cut any loose and/or visible fabric.
- 6) Finish grade the adjacent streambed, channel banks, and/or floodplain to provide a smooth even grade transition between project structure components (arms, sills, inverts, floodplain sills, etc.) and the existing and/or proposed ground surface.
- 7) Place Coir fiber matting as shown on the detail per the Coir Matting Bank Stabilization specification and Construction Detail. Extend Coir fiber matting below toe of slope as shown on the detail prior to placing riffle material above the toe of slope.

In locations where exposed bedrock and/or other existing features extend to and/or within the limits of the proposed work, the angled log riffle installation shall be field adjusted to incorporate the bedrock/existing feature, into the finished work. The Engineer shall be contacted as soon as the presence of bedrock and/or other existing features are field identified to determine the appropriate method of incorporation. Site conditions may require slight deviation from the plan and shall be approved by the Engineer.

4.0 MEASUREMENT

The quantity of angled log riffle to be paid for shall be the actual number of square yards "Riffle, Angled Log" completed and accepted into the final work. The length shall be measured along the stream centerline from begin to end as show on plans, and the width will be measured from bankfull to bankfull as shown on the plans.

No separate measurement of materials shall be made under this item for logs, boulders, backfill material, fabric, and/or other incidental items.

5.0 PAYMENT

The work covered by this section shall be paid for at the contract per square yard price for "Riffle, Angled Log" will be full compensation for all work covered in this special provision, including, but not limited to grading, removal of existing structures, installation of materials, adjusting, excavating, excavated design pool, placing backfill, maintaining the feature through acceptance, and for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by the Engineer. Pool excavation beyond measurement limits of angled log riffle as shown on the detail will be incidental to the measurement indicated above.

There shall be no separate payment for furnishing trees meeting the requirements of this specification.

No separate payment shall be made for subsidiary items.

Payment shall be made under:

RIFLE, ANGLED LOG.....SY

SPSRW-05R, EROSION CONTROL MATTING

Version Date: 8/30/2021

Revision Date: 06/11/2022 by PNB

1.0 DESCRIPTION

The work covered in this special provision includes all elements of work covered in Section 1631, "Rolled Erosion Control Products" and applicable Charlotte Land Development Standards of the Standard Specifications with the following exceptions pertaining to Materials, Installation, and Payment.

2.0 MATERIALS

Material	Description	Tensile Strength (lbs/ft) (MD)	Duration (mos)	Unveg Velocity (ft/s)	Weight (oz/sy)
Straw	Biodegradable w/ organic netting	100 - 200	12	5.0 - 7.0	8 - 9.5
Straw/Coconut	Biodegradable w/ organic netting	190 - 210	18 - 24	7.0 - 8.0	8 - 11.5
Coconut	Biodegradable w/ organic netting	190 - 240	24 - 36	9.0 - 10.0	9.5 - 10
		Dry Tensile Strength (lbs/ft) (MD/TD)			
Coir Fiber 400g	Biodegradable w/ coir fiber	500 - 800	36	8	11.8 - 12.5
Coir Fiber 700g	Biodegradable w/ coir fiber	1250 - 1600	36	10.0 - 12.0	20.0 - 27
Coir Fiber 900g	Biodegradable w/ coir fiber	1900 - 2000	36	16	26 - 27

Anchors:

Staples Article 1060-8:

Only allowed for Straw, Straw/Coconut, and Coconut Matting

Wooden Dead Stout Stake:

Provide hardwood stakes 24" long with a 2" x 2" nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving through the coir fiber mat and down into the underlying soil.

Wooden Matting Stake:

Provide hardwood stakes 12" long, with a nominal 1" x 1" square cross section. One end of the stake must be sharpened or beveled to facilitate driving through the coir fiber mat and down into the underlying soil. The other end of the stake needs to have a 1" - 2" long head at the top with a 0.75" notch following to catch and secure the coir fiber mat.

Alternate methods of securing the coir fiber mat with the stake may be proposed by the Contractor to be approved by the Engineer prior to implementation.

All matting shall be 100% biodegradable with organic netting. Plastic or non-biodegradable netting will not be allowed.

This item also includes all elements of work required for seedbed preparation, furnishing and applying fertilizer, limestone, and grass seed in accordance with *Seeding and Mulching* Special Provision of these specifications except that the portion pertaining to mulch will not apply.



3.0 INSTALLATION

Installation will be in accordance with Section 1631, “Rolled Erosion Control Products” with the exception that the staple pattern will be per the Manufacturer’s recommendations or as directed by the Engineer.

Coir matting bank stabilization installation shall be per City of Charlotte Storm Water Services Coir Matting Bank Stabilization detail.

4.0 MEASUREMENT

Measurement will be per Section 1631, “Rolled Erosion Control Products” with the exception that there shall be no separate measurement for overlap areas.

5.0 PAYMENT

Payment will be per Section 1631, “Rolled Erosion Control Products” with the exception that no separate payment will be made for wire staples, overlap areas, seedbed preparation, furnishing and applying fertilizer, limestone and grass seed for Erosion Control Matting.

Payment will be made under:

MATTING FOR EROSION CONTROL (COIR FIBER MATTING 700).....SY

SPSRW-06, IMPERVIOUS DIKE

Version Date: 02/03/2017

Revision Date: MM/DD/YYYY by XXX

1.0 DESCRIPTION

The Contractor shall construct an impervious dike in such a manner as approved by the Engineer, including, but not limited to furnishing materials, construction, maintenance, and removal of an impervious dike for the purpose of preventing normal stream flow and dewatering a stream segment for construction operations. The impervious dike shall not permit seepage of water into the construction site.

2.0 SUBMITTALS

Prior to construction, the Contractor shall submit a detail illustrating the component materials and dimensions of the impervious dike. The impervious dike shall impound water to a depth range as shown on the impervious dike detail and shall minimize erosion and discharge of sediment in the event of overtopping.

3.0 METHODS

The impervious dike shall be constructed in locations as directed by the Engineer. Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rain water and water removed from excavation to collecting or run-off areas. Do not use trench excavations as temporary drainage ditches.

The intake for the drain mechanism upstream of the impervious dike should be located near the top of the water column unless otherwise specified by the City. Water removed from the pond or excavated project site shall pass through a special stilling basin to be located upstream of the receiving stream unless otherwise noted.

4.0 MEASUREMENT

Impervious dike will be measured as the actual number of linear feet of impervious dike(s) constructed, measured in place at the top of the structure from end to end along the centerline of each separate installation that has been completed and accepted.

5.0 PAYMENT

The payment will be considered as full compensation for all work covered in this special provision, including, but not limited to furnishing all labor materials, construction, maintenance, and removal of the impervious dike.

The costs for special stilling basins will not be measured under this section but will be measured in accordance with the Special Stilling Basin Special Provision.

Payment will be made under:

IMPERVIOUS DIKE.....LF

SPSRW-07, SPECIAL STILLING BASINS

Version Date: 7/24/2019

Revision Date: MM/DD/YYYY by XXX

1.0 DESCRIPTION

The special stilling basins shall be used to filter turbid water from inside the work area during construction as shown in the plans. The work covered by this section, includes, but is not limited to furnishing all labor, materials, placing and installing Type 2 geotextile fabric, bedding drainage area, placing, maintaining, and removing the sediment filter bags, and removal and disposal of bedding and fabric as directed by the plans and the Engineer. Wood pallets or hay bales may be used in lieu of stone as directed. The quantity of sediment filter bags may be increased, decreased, or eliminated entirely at the direction of the Engineer. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

2.0 MATERIALS

The special stilling basins shall be a water permeable sediment filter bag that traps sand, silt, and fines as sediment laden water is pumped into it. The geotextile fabric shall meet the requirements described in Section 1056 *Geosynthetics* for Type 2 Fabric of the NCDOT Standard Specifications.

Stone bedding shall meet the requirements described in Section 1610 *Stone for Erosion Control* for Sediment Control Stone, Standard Size No. 5 or No. 57 of the NCDOT Standard Specifications.

3.0 METHODS

The special stilling basin shall be constructed with a sediment filter bag to a minimum size of 10' x 15' (3m x 4.6m) made from a non-woven fabric. It shall have a sewn-in 8 in. (20.3cm) (maximum) spout for receiving pump discharge. The bag seams shall be sewn with a double needle machine using a high strength thread. The seams shall have a minimum wide width strength as follows:

Test Method Minimum Specifications

ASTM D-4884 *Standard Test Method for Strength of Sewn or Bonded Seams of Geotextiles* - 60 lb. /in (10.7 kg/cm)

The fabric used to construct the sediment filter bag shall be stabilized to provide resistance to ultra-Violet degradation and meet the following specifications for flow rates, strength, and permeability:



Property	Test Method	Minimum Specifications	
		English	Metric
Weight	ASTM D-3776	8.0 oz./yd.	248.03 g/m
Grab tensile	ASTM D-4632	200.0 lb.	90.72 kg
Puncture	ASTM D-4833	130.0 lb.	58.97 kg
Flow rate	ASTM D-4491	80.0 gal/min/sf	0.47 l/s/sm
Permittivity	ASTM D-4991	1.5 1/sec	
UV Resistance	ASTM D-4355	70.0 %	

The special stilling basins shall be placed so the incoming water flows into and through the sediment filter bag without causing erosion. The bag will be placed on a drainage layer consisting of at least 8" of coarse aggregate material over Type 2 geotextile fabric. The Contractor will grade the bed to ensure that the filtered water will exit at the desired location. The exit location shall be chosen to prevent erosion. The neck or spout of the bag shall be tied off tightly to stop the water from flowing out of the bag without going through the walls. The sediment filter bag shall be replaced and disposed of when it is ¾ full of sediment, when it is impractical for the bag to filter the sediment out at a reasonable flow rate, or when it becomes punctured or torn. Prior approval from the Engineer must be received before removal and replacement. The Contractor shall be responsible for providing a sufficient quantity of sediment filter bags to contain silt from pumped effluent during construction.

4.0 MEASUREMENTS

The quantity of special stilling basins to be measured will be the actual number of sediment filter bags used during construction as specified and accepted by the Engineer.

The pumping operation will not be measured under this section, but will be measured in accordance with the *Pump Around Operation* Special Provision.

5.0 PAYMENTS

The quantity of special stilling basins as measured above will be paid for at the contract unit price per each for "Special Stilling Basin". Such price and payment will be full compensation for work covered by this provision, including but not limited to furnishing all labor, materials, placing and installing Type 2 geotextile fabric, bedding drainage area, placing, maintaining, and removing the sediment filter bags, and removal and disposal of bedding and fabric.

Pumping Operation will be paid for separately in accordance with the *Pump Around Operation* Special Provision.

Payment will be made under:

SPECIAL STILLING BASINS..... EA

END OF ARTICLE 4: PROJECT SPECIAL PROVISIONS – STREAM RESTORATION AND WETLANDS



ADDENDA