



Raleigh

**PROJECT MANUAL
FOR
MOORE SQUARE PARK DOG RUN**

**CITY OF RALEIGH
PROJECT #: 274-PR-MSDR2-2025
July 2025**

Prepared for and by:
PARKS, RECREATION & CULTURAL RESOURCES DEPARTMENT
222 W. Hargett Street, Suite 608
Raleigh, NC 27601

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ADVERTISEMENT FOR BIDS
POSTED: July 2, 2025
CITY BID NUMBER: 274-PR-MSDR2-2025

Project: Moore Square Park Dog Run
Owner: City of Raleigh, Parks, Recreation, and Cultural Resources
222 W. Hargett Street, Suite 601
Raleigh, North Carolina 27601
Project Manager: Terry Naranjo, Capital Projects Manager
Phone: (919) 996-4796 E-mail: terry.naranjo@raleighnc.gov

Contact for Bid Documents:

City of Raleigh, Parks, Recreation, and Cultural Resources
Bid Agent: Terry Naranjo, Capital Projects Manager
Phone: (919) 996-4796
E-mail: terry.naranjo@raleighnc.gov

Sealed Bids will be received by the City of Raleigh, Parks, Recreation & Cultural Resources Department, at **222 W. Hargett Street, Suite 608, Raleigh, NC 27601 until 1:00 p.m. local prevailing time on Thursday, July 24, 2025** for the furnishing of labor, material, and equipment for site improvements at the Moore Square Park Dog Run. ***This project is being bid informally; bids will NOT be opened at a public forum.***

The Project Scope is defined by the Contract Documents and consists of the following:

Construction of new concrete pad, 4' ht. steel fencing and gates. Tree protection fencing within Moore Square Park at 201 S. Blount Street, Raleigh, NC, a City of Raleigh public park. Refer to project Plans and Project Manual for complete description of project scope.

After Bids are opened, the Owner shall evaluate them in accordance with the methods and criteria set forth in the Instructions to Bidders. The Owner/City Council reserves the right to waive any informality or to reject any or all Bids. Unless all Bids are rejected, Award will be made to the lowest responsible and responsive Bidder, taking into consideration quality, performance and the time specified in the Bid Form for the performance of the Contract.

A Non-mandatory Pre-Bid Meeting will be held at 10:00am, local prevailing time on Monday, July 14th at the Moore Square Park at 202 S. Blount Street, Raleigh, NC. Participants are requested to meet at the Southeast corner of the Park. A tour of the Project Area will be held following the Pre-Bid Meeting..

Following review of pre-bid meeting agenda items at the Pre-Bid Meeting, participants will be allowed to ask questions related to the project scope of work. Other questions will be received ONLY in written form. **The deadline to submit written questions to the Bid Agent is 4:00pm local prevailing time on Wednesday, July 16, 2025.** Questions will be accepted via email only.

Email pre-bid questions to: [Terry Naranjo, terry.naranjo@raleighnc.gov](mailto:Terry.Naranjo@raleighnc.gov)

Complete Bidding Documents can be obtained by requesting a PDF electronic set. Please contact Terry Naranjo, terry.naranjo@raleighnc.gov. No plan deposit is required. Neither the Owner nor the Bid Agent will be responsible for full or partial sets of Contract Documents, including any Addendum, obtained from any other source.

With requests for Bidding Documents, all requestors shall supply the following information for registration with the City of Raleigh: company name, contact person, street address, phone numbers, and email address for bidding office. Indicate if the firm will be a bidder, supplier, or sub-contractor.

Partial sets of plans and specifications will not be issued. Contractors are responsible for distributing documents to all sub-contractors.

Each bid must be made on the blank forms provided in the PROJECT MANUAL and must be enclosed in a sealed envelope and addressed to City of Raleigh Parks, Recreation and Cultural Resources Department, Attn: Terry Naranjo, 222 W Hargett Street, Suite 608, Raleigh, North Carolina 27601. The name, address, and the North Carolina Contractor's License Number of the Bidder must be plainly written on the outside the envelope, and the envelope shall be marked with "Bid for MOORE SQUARE PARK DOG RUN and PROJECT NO. 274-PR-MSDR2-2025".

See the Bid Submittal Checklist in the Project Manual for all items required as part of each Bid Submittal.

Any delivery proposals should be addressed to:

- Via Registered Mail (USPS) ONLY: City of Raleigh, Engineering Services Department, Attn: Terry Naranjo, Re: MOORE SQUARE PARK DOG RUN and PROJECT NO. 274-PR-MSDR2-2025, P.O. Box 590, Raleigh North Carolina 27602.
- Via Other Means: City of Raleigh, Parks, Recreation and Cultural Resources Department, Attn: Terry Naranjo, Re: Bid for MOORE SQUARE PARK DOG RUN and PROJECT NO. 274-PR-MSDR2-2025, 222 W Hargett Street, Suite 608, Raleigh, North Carolina 27601.

Mark the outside envelope with the Project Number. Mailed proposals must be received before the date and time specified above. Bidders are responsible for ensuring delivery of mailed proposals before the deadline.

No bid may be withdrawn for ninety (90) days after the bid opening. The Owner reserves the right to reject any or all bids and to waive informalities.

Each Bidder must show evidence that it is licensed under Chapter 87 of the N.C. General Statutes, and the City reserves the right to request additional bidder qualifications as needed.

Pursuant to General Statutes of North Carolina Sections 143-128.2 and 143-131, and in accordance with City policy, the City of Raleigh encourages and provides equal opportunity for certified Minority and Woman-Owned Business Enterprise (MWBE) businesses to participate in all aspects of the City's contracting and procurement programs to include Professional Services; Goods and Other Services; and Construction. The prime contractor will be required to identify participation of MWBE businesses in their Bid, and how that participation will be achieved.

Furthermore, the City's goal is to contract or sub-contract fifteen percent (15%) of the contract amount to certified MWBEs on construction projects over \$300,000, or with contracts that include \$100,000 or more in state funding.

(Note this project has no state or federal funding).

For more information or questions about the MWBE policy, please contact the City's Business Assistance Program coordinator at 919-996-4271. Along with the Bid Forms, each Bidder must submit the Informal Bid MWBE forms contained in the Project Manual.

The Owner reserves the right to reject any Proposal for failure to comply with all requirements of this Notice or of any of the Contract Documents; however, the Owner may waive any minor defects or informalities at its discretion. The Owner further reserves the right to reject any and all Proposals or to Award the contract which in its judgment is in the best interest of the Owner.

***** END OF BID ADVERTISEMENT *****

CITY OF RALEIGH – BID PROPOSAL FORM
Moore Square Park Dog Run
PROJECT # 274-PR-MSDR2-2025(Informal Bid)

City of Raleigh
Parks, Recreation, and Cultural Resources Department
Park Development and Communications
Attn: Terry Naranjo, Capital Project Manager
222 West Hargett Street, Suite 601
Raleigh, North Carolina 27601

Date: _____

The undersigned bidder hereby signifies that it is their intention and purpose to enter into a Contract with the City of Raleigh, N.C. to furnish all labor, materials, tools, equipment, apparatus, supplies, etc. required and to do all the work necessary for and because of the construction, erection, and/or installation of the proposed

Moore Square Park Dog Run
Project No. 274-PR-MSDR2-2025
for the City of Raleigh, N.C.

The undersigned bidder has carefully examined and understands the Form of Contract, the Form of Contract Bonds, the General Conditions, the Supplemental Conditions, and the Plans and Specifications, all of which are acknowledged to be part of the proposal and the Proposal Form. The undersigned has carefully examined the site of the Project and is familiar with the conditions under which the Work, or any part thereof, is to be performed and the conditions which must be fulfilled in furnishing and/or installing, erecting, or constructing any or all items of the Project.

The undersigned agrees to provide all necessary tools, machinery, equipment, apparatus, and all other means necessary to do all the work and will furnish all labor, materials and all else required to complete such Contract as may be entered into, in the manner prescribed in and in accordance with the terms of the Specifications and Contract and in accordance with the true intent and meaning thereof, and in accordance with these documents and within the time limit specified.

In addition to all other agreements and assurances, the undersigned Bidder understands and hereby agrees as follows:

1. If this contract is awarded to the Bidder, the Bidder, upon completion of this contract, or at any other time requested, furnish to the City of Raleigh an accurate itemized statement of North Carolina Sales Taxes paid on materials, supplies, equipment, and any other items charged to this contract, and otherwise fully comply with the *Procedure for Reporting North Carolina Sales Tax Expenditures*, attached.
2. The Bidder represents and agrees to complete the entire project in the following number of Consecutive Calendar Days: **One-hundred fifty (120) days from the date on the Notice to Proceed.**
3. The Bidder agrees to comply with the City's policy to encourage bidders to use Certified MWBE businesses as specified in the City's MWBE Requirements.

The Bidder agrees to execute the work described and set forth in the Plans and Specifications for the amounts as follows:

Base Bid (All work and includes Concrete Pad, Steel Fencing and Gates as 4'-0" Ht. – LUMP SUM)

\$ _____
(In written words)

\$ _____
(In numerals)

Name of General Contractor and License Number _____

NC GS143-128(d) requires all single prime bidders to identify their subcontractors for the above subdivisions of work. A contractor whose bid is accepted shall not substitute any person as subcontractor in the place of the subcontractor listed in the original bid, except (i) if the listed subcontractor's bid is later determined by the contractor to be non-responsible or non-responsive or the listed subcontractor refuses to enter into a contract for the complete performance of the bid work, or (ii) with the approval of the awarding authority for good cause shown by the contractor.

UNIT PRICES

Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes to the base bid quantity of the work all in accordance with the contract documents.

<u>No. 1</u> Unsatisfactory soil removal	<u>CY</u>	Unit Price (\$)_____
<u>No. 2</u> Fill ABC Placement	<u>CY</u>	Unit Price (\$)_____
<u>No. 3</u> Concrete Paving	<u>CY</u>	Unit Price (\$)_____

ALLOWANCES

INCLUDE IN THE BASE BID PROPOSAL, the following allowances as specified in Division 1 Allowances Section 01 21 00.

Allowance No. 1: Lump-Sum Allowance: Include the sum of \$5,000 for Owner's Contingency.

ACKNOWLEDGMENT OF RECEIPT OF ADDENDA

The undersigned Bidder hereby acknowledges receipt of the following Addenda:

<u>Addendum Number</u>	<u>Dated</u>	<u>Acknowledge Receipt</u> (initial)
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please check here if no addenda were received: _____

Acknowledged for: _____
(Name of firm or corporation making bid)

By: _____
(Signature of Authorized Representative)

Name: _____
(Print or Type)

Title: _____

Date: _____

PROPOSAL SIGNATURE PAGE

If the proposal exceeds \$500,000.00, the bidder is required to furnish surety as specified in the Construction Contract. Upon failure to do so, the bidder agrees to forfeit to the Owner, attached cashier's check, certified check, or bid bond in the amount of 5% of the total bid proposal or:

\$ _____.

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

Respectfully submitted this day of _____

By: _____
(Name of firm or corporation making bid)

WITNESS:

(Proprietorship or Partnership)

By: _____
Signature

Name: _____
Print or type

Title _____
(Owner/Partner/President/VP)

Address _____

ATTEST:

By: _____

Title: _____
(Corp. Sec. or Asst. Sec. only)

License No. _____

Federal I.D. No. _____

Email Address: _____

(CORPORATE SEAL)

BIDDER QUALIFICATIONS:

The Bidder shall furnish the following information designed to assist the Owner in determining whether or not the Bidder is qualified to perform the work described in the Bid and Contract Documents:

1. List three references with contact person and telephone number who are qualified to objectively judge the results of similar work performed by the bidder in the last three years.

A. _____

NAME AND TITLE	TELEPHONE NUMBER
_____	_____
PROJECT TITLE/DOLLAR AMOUNT	DATE OF COMPLETION
_____	_____
Project Role: <input type="checkbox"/> Prime GC <input type="checkbox"/> Subcontractor	

B. _____

NAME AND TITLE	TELEPHONE NUMBER
_____	_____
PROJECT TITLE/ DOLLAR AMOUNT	DATE OF COMPLETION
_____	_____
Project Role: <input type="checkbox"/> Prime GC <input type="checkbox"/> Subcontractor	

C. _____

NAME AND TITLE	TELEPHONE NUMBER
_____	_____
PROJECT TITLE/ DOLLAR AMOUNT	DATE OF COMPLETION
_____	_____
Project Role: <input type="checkbox"/> Prime GC <input type="checkbox"/> Subcontractor	

2. List previous contracting experience, including contract dollar amounts:

NOTE: The Bidder shall attach additional sheets of information as needed to provide above requested information.

ADDITIONAL BIDDER'S CERTIFICATION

Acceptance of Terms:

In submitting this Proposal, the undersigned agrees that this Bid will remain in effect for a period of ninety (90) days following the opening of the Bids, that the undersigned agrees to enter into a Contract with the Owner, if awarded, on the basis of this Proposal, and that the undersigned agrees to complete the work in accordance with the Contract Documents.

Non-Collusion in Bidding:

The Bidder specifically agrees to abide by all applicable provisions of Article 3 of Chapter 133 of the North Carolina General Statutes. By submission of this Bid, each Bidder and each person signing on behalf of any Bidder certifies, and in case of a joint Bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best knowledge and belief:

1. The prices in this Bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or to any competitor;
2. Unless otherwise required by law, the prices quoted in the Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other Bidder or to any competitor; and
3. No attempt has been made or will be made by the Bidder to induce any other person, partnership, or corporation to submit or not to submit a Bid for the purpose of restricting competition.

Type of Business:

The undersigned hereby represents that it is a

(corporation, partnership, or an individual)

If a corporation, the undersigned further represents that it is duly qualified as a corporation under the Laws of the State of North Carolina and it is authorized to do business in this State.

Firm Name

Date

Authorized Signature

Title

Moore Square Park Dog Run

Name of Project

Address of Business

CONTRACTOR'S PERFORMANCE POLICY

RESOLUTION NO. (1992) -790

A RESOLUTION TO REGULATE THE PARTICIPATION IN THE CITY CONSTRUCTION PROJECTS BY CONTRACTORS WHO MAY NOT BE CAPABLE OF TIMELY AND PROPER COMPLETION OF CITY PROJECTS.

WHEREAS, The City of Raleigh wishes to minimize cost and inconvenience to the citizenry caused by the failure of contractors to complete projects in a timely manner in accordance with approved project schedules; and

Whereas, North Carolina law allows cities to award bids to responsible bidders and the inability to complete work on time is one indication of a lack of responsibility.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RALEIGH:

Section 1. That the City Manager may disqualify bidders from participation in bidding and award of contracts for city construction projects based on the following conditions existing simultaneously:

A. The dollar value of the work completed is less than the dollar value of the work which should have been completed on the basis of the contractor's approved progress schedule by more that twenty percent of the current contract amount. The dollar amount of the work completed will be the total estimate to date shown in the latest partial pay estimate. The current contract amount will be the contract estimate plus accumulated overruns and less accumulated underruns shown in the latest partial payment estimate.

B. The percentage of the work completed is less than the percentage of contract time elapsed on the work by more than twenty percent. The percentage or work completed will be the dollar value of the work completed as defined above divided by the current contract amount as defined above. The percentage of contract time elapsed will be the number of calendar days elapsed as shown in the latest partial pay estimate divided by the total contract time in calendar days.

Section 2. The City Manager shall not include any late days, which are caused by the City in any of his calculations directed at determining bid status.

Section 3. All City construction project specifications shall contain a specific provision clearly outlining the policies set in this Resolution, including the criteria for determining whether a contractor is behind schedule, and the specifications shall clearly state the City's intent to enforce the provisions of this Resolution.

Section 4. The terms of the Resolution shall apply only to contracts for which the specifications for bidders are issued after the effective date of this Resolution.

Section 5. Any contractor who wishes to contest the decision of the City Manager declaring ineligibility may appeal to the City Council by delivering a notice of appeal to the City Clerk no later than ten days after receipt of the City Manager's decision. The notice of appeal shall clearly set out the reasons why the Contractor believes that the terms of this Resolution have been inappropriately applied or the equitable arguments for not applying this Resolution's terms. When considering an appeal the City Council shall consider, among other things, the report of the City Manager, the notice of appeal, and the contractor's current status on any other current City Contracts and its performance on any contracts to which the contractor and the City have been parties to within the two calendar years immediately preceding the filing of the notice of appeal.

Section 6. Bidders so disqualified shall remain disqualified for any period in which they are still in conflict with the schedule provisions of this section.

Section 7. This Resolution is effective upon adoption Adopted 10/6/92

SIGNATURE

PRINTED NAME

TITLE

Firm Name

DATE

BIDDER SAFETY EVALUATION QUESTIONNAIRE

Bidding Contractor (name and address):

CONTRACTOR SAFETY RECORD INFORMATION

The Contractor's safety record shall be reviewed and evaluated in addition to other quality and performance criteria as part of bid evaluation process. Failure to provide the requested information and documentation may result in rejection of your bid as non-responsive. Accordingly, all bidders must submit the following information regarding their safety record.

The following definitions shall apply to this section:

“OSHA” – Acronym for the Federal Occupational Health and Safety Administration. The term “OSHA” as used in this Policy also refers to any state or local agency having jurisdictional authorization to enforce worker safety requirements and assess fines or warnings for violation of worker safety standards.

1. Answer the following OSHA Specific Questions:

- (a) Within the last 2 years, has the bidder received any citations classified by OSHA as being (1) serious, (2) willful and/or (3) repeat violations where your company operates?

Yes _____ No _____

(If yes, attach a copy of each such citation and include violation description.)

- (b) Has the bidder experienced any major work-related injuries or work-related fatalities within the last five (5) years?

Yes _____ No _____

- (c) Has the bidder had any citations issued by OSHA as a result of work related injuries or fatalities within the past five (5) years?

Yes _____ No _____

(d) Is the bidder under investigation for any work-related injuries or fatalities?

Yes _____ No _____

(e) If your answer is “yes” to 1(b), (c) or (d), provide a copy of the citation(s), list of number(s) of serious injuries and/or fatalities and documented explanation of the incident(s) and injuries/fatalities.

2. Safety Plan:

(a) Does the company have a written comprehensive safety program that includes and indicates responsibility for all aspects of safety management (i.e. overall company policy and individual responsibilities, site inspections, first aid, fall protection, injury and illness prevention, fleet safety, Personal Protective Equipment (PPE), aerial lift, fire protection procedures etc.)?

Yes _____ No _____

(b) Does the company have a written plan for safety training of new employees and ongoing training of existing personnel and supervisors?

Yes _____ No _____

(c) Are all trades and laborers made aware of, receive instruction and regularly updated on safety compliance, best practices and operational requirements to ensure safe conditions are maintained on the job site?

Yes _____ No _____

(d) Does the company have documented evidence of safety training that they have conducted?

Yes _____ No _____

(e) Does the company have and maintain documented safety plan information?

Yes _____ No _____

(f) Is there a specific safety plan implemented for each project including pre-job safety inspections, measures for corrective actions and means for documenting and correcting unsafe conditions?

Yes _____ No _____

(g) Does the company hold regular safety meetings for employees and subcontractors at each job site throughout duration of project construction?

Yes _____ No _____

(h) Does the company provide notice at the job site that indicates to all staff where safety equipment is available onsite and clearly indicates the locations of safety equipment storage locations?

Yes _____ No _____

(i) If the company has employees with limited English ability, does the company have a written plan for ensuring that their employees understand the training they are being given?

Yes _____ No _____

(j) Do all supervisors have an appropriate documented level of OSHA training (e.g., a minimum of 30-hour OSHA construction safety training)?

Yes _____ No _____

(k) Do employees have documented basic OSHA 10-hour construction safety training?

Yes _____ No _____

(l) Does the company have a documented Hazard Communication Program?

Yes _____ No _____

3. Storm and Inclement Weather Safety Planning:

(a) Does the company have a written Storm Hazard Awareness and Preparedness Plan and site monitoring/notification means to provide proper safety measures at the project site in the event of inclement or extreme weather? (i.e. site evacuation procedures, damage protection, securement of equipment and materials, removal of debris and scrap materials, protection of incomplete underground storm drain system against sand and silt infiltration etc.)?

Yes _____ No _____

4. Required Written Explanation of Safety Record. If the bidder has any of the following:

(a) answered “yes” to any of the OSHA Specific Question above, or

(b) answered “no” to any of the Safety Plan or Storm Safety questions,

the bidder shall then provide the City, in its bid, a detailed written explanation of its safety record and the reasons why such safety history is NOT representative of its future performance and an explanation of what specific actions it has taken to improve its overall safety record. Failure to provide a written explanation of its safety record pursuant to this paragraph may deem a bidder as non-responsive by the City.

**** END OF SAFETY EVALUATION QUESTIONNAIRE ****



Minority and Women-Owned Business Enterprise Program (MWBE) Forms

BID FORMS	
DOCUMENT	SUBMISSION REQUIREMENTS
<i>For construction and repair projects that are less than \$300,000 provide the following:</i>	
<ul style="list-style-type: none"> Acknowledgment of City MWBE Policy Identification for MWBE Participation for Informal Project Bids Form 	Due with Bid
<i>For construction and repair projects of \$300,000 or more or for projects that are \$100,000 or more that include any State funding provide the following:</i>	
Acknowledgment of City MWBE Policy	Due with Bid
Identification of MWBE Participation <ul style="list-style-type: none"> List all MWBE firms intended to be used 	Due with Bid Complete Applicable Form: Formal, Informal, Professional
Affidavit A <i>Listing of Good Faith Efforts (GFE)</i> <ul style="list-style-type: none"> Earn at least 50 points 	Due with Bid (If self-performing, submit Affidavit B instead)
Affidavit B <i>Intent to Perform Contract with Own Workforce</i> <ul style="list-style-type: none"> Use only if you are self-performing 100% 	Due with Bid <ul style="list-style-type: none"> If using any subs or suppliers submit Affidavit A instead Affidavits C and D not required
Letter of Intent <ul style="list-style-type: none"> Bidder must submit a separate Letter of Intent for each MWBE subcontractor listed on Affidavit C or Affidavit D. 	Due within 3 business days of notice of being apparent LRRB.
Affidavit C <i>MWBE Subcontractor Utilization Commitment</i> <ul style="list-style-type: none"> Bidder meets the 15% MWBE Goal List all MWBE firms to be utilized 	Due within 3 business days of notice of being apparent LRRB.
Affidavit D <i>Good Faith Efforts (GFE) & Statement of Compliance</i> <ul style="list-style-type: none"> Bidder does not meet the 15% MWBE Goal Documentation of GFE to be provided Minimum of 50 points 	Due within 3 business days of notice of being apparent LRRB.
REPORT FORMS	
DOCUMENT	SUBMISSION REQUIREMENTS
Contract Subcontractor Identification Form	Due within 30 days of contract award.
MWBE Good Faith Negotiation and Solicitation Forms (Optional)	Due upon request by the MWBE office.
Affidavit E <i>Subcontractor Payment Form</i>	Each invoice and final payment request.
Request to Change MWBE Subcontractor <ul style="list-style-type: none"> Firm may replace MWBE subcontractor For cause and with approval of the City Good Faith Efforts apply. 	Due throughout entire contract period. Anytime MWBE subcontractor change(s)

INFORMATION FOR BIDDERS REGARDING COMPLIANCE WITH THE CITY OF RALEIGH'S MINORITY AND WOMEN-OWNED BUSINESS ENTERPRISE (MWBE) PROGRAM

Policy

In accordance with North Carolina law, the City of Raleigh encourages and provides an equal opportunity for Certified Minority and Women-Owned Business Enterprises (MWBE) to participate in all aspects of the City's contracting and procurement programs.¹ The prime contractor or a first-tier subcontractor on a construction manager at risk (CMAR) project (collectively, "Bidder") shall be required to identify participation of MWBE businesses in its proposal, and document how that participation will be achieved. Bidders are subject to the City's MWBE subcontracting requirements (including good faith efforts as applicable), regardless if a Bidder is itself a Certified MWBE.²

The City has an aspirational goal of 15% of the total contract amount to be performed by MWBE businesses in contracts awarded by the City for: (i) construction and building projects of \$300,000 or more; and (ii) construction and building projects of \$100,000 or more that have any state funding.

Definitions

Certified Minority Business (MWBE)

A business which:

- a. At least fifty-one percent (51%) is owned by one or more Minority Persons or Socially and Economically Disadvantaged Individuals; or in the case of a corporation, in which at least fifty-one percent (51%) of the stock is owned by one or more Minority Persons or Socially and Economically Disadvantaged Individuals;
- b. The management and daily business operations are controlled by one or more Minority Persons or Socially and Economically Disadvantaged Individuals; and
- c. Is certified in one of the MWBE categories as defined by the NC Department of Administration/Historically Underutilized Business (HUB) and the NC Department of Transportation/Disadvantaged Business Enterprise (DBE).

Minority Person

A person who is a citizen or lawful permanent resident of the United States and who is:

- a. Black, that is, a person having origins in any of the black racial groups in Africa;
- b. Hispanic, that is, a person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of race;
- c. Asian American, that is, a person having origins in any of the original peoples of the Far East, Southeast Asia, Asia, the Indian subcontinent, or the Pacific Islands;
- d. American Indian, that is, a person having origins in any of the original peoples of North America; or
- e. Non-minority Female.

Socially and Economically Disadvantaged Individual

Socially disadvantaged individuals are those who have been subjected to racial or ethnic prejudice or cultural bias because of their identity as a member of a group without regard to their individual qualities. Economically disadvantaged individuals are those socially disadvantaged individuals whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area who are not socially disadvantaged.³

¹ See, N.C.G.S. §§ 143-128.2, 143-128.4, 143-129, and 143-131.

² See, City of Raleigh SOP 505-2.

³ See, 15 U.S.C. 637.

Bidder Responsibilities

Bidders agree to comply with all the terms and conditions of the City of Raleigh's Minority and Women-Owned Business Enterprise (MWBE) Program. Bidders must use good faith efforts (if applicable) to meet participation goals through the award of subcontracts to certified MWBE businesses consistent with City policy and North Carolina law.

Pre-Bid Opening

The City's Solicitation Documents include forms that: (a) capture information about MWBEs and any other subcontractors or suppliers that a Bidder intends to use on a contract ("Identification of MWBE Participation") and (b) affidavits to be completed by the Bidder.

Identification of MWBE Participation

The "Identification of MWBE Participation" must be completed by the Bidder on the City's form and submitted with its bid. If the project work is to be self-performed by the Bidder, the Bidder must so designate by checking the appropriate box on the form. For all Bidders which will not be self-performing the project work, the "Identification of MWBE Participation" form must be completed in its entirety. The Bidder must list on the City's form all MWBE businesses which will be construction subcontractors, vendors, or suppliers (collectively, "Subcontractors") on the project, and the total dollar value of its bid that will be performed by MWBEs. The failure to complete the "Identification of MWBE Participation" form in its entirety, or the failure to submit a completed "Identification of MWBE Participation" form with its bid, will render the bid non-responsive and the Bidder's bid will not be considered for award. The City will only credit MWBE participation for those Subcontractors listed on the "Identification of MWBE Participation" form.

Affidavit A: Listing of Good Faith Efforts

If the Bidder intends to subcontract any portion of the project work on a contract, an Affidavit A must be properly executed and submitted with its bid, listing the good faith efforts the Bidder made to achieve MWBE subcontracting goals for the contract prior to submitting its bid. The Affidavit A must be completed using the City's form. A minimum of fifty (50) good faith efforts points is required, the failure to achieve at least 50 points is grounds for rejection of a bid.

Affidavit B: Intent to Perform Contract with Own Workforce

In lieu of an Affidavit A, a Bidder that intends to perform 100% of the project work on a contract with its own current workforce may submit an Affidavit B with its bid. In submitting an Affidavit B, a Bidder certifies that the Bidder does not customarily subcontract elements of this type of project, and normally performs, has the capability to perform, and will perform all elements of the project work on the contract with its own current workforce. The Affidavit B must be completed using the City's form.

The failure to submit a properly executed Affidavit A or Affidavit B with a bid will render the bid non-responsive and the bid will not be considered for award.

Bid Opening

At the project bid opening, the total MWBE participation for each bid will be recorded. Upon being named the apparent low bidder, the Bidder must comply with the following:

- a. If the Bidder submitted an Affidavit B with its bid indicating its intent to perform 100% of the project work on the contract with its own current workforce, then the Bidder is not required to resubmit its Affidavit B or to submit any additional affidavits (i.e., Affidavit C or Affidavit D). The City, in its discretion, may request that the Bidder submit additional information or documentation, including, but not limited to, information relating to the Bidder's subcontracting history and its ability to perform all elements of the project work on the contract with its own current workforce.

- b. If the Bidder submitted an Affidavit A with its bid and the amount of MWBE participation as a percentage of the total contract price meets or exceeds the applicable goal, then the Bidder must submit to the City an Affidavit C within three (3) business days after being notified by City Staff that it is the apparent low bidder. The Bidder must complete the Affidavit C in its entirety using the City's form.
- c. If the Bidder submitted an Affidavit A with its bid and the amount of MWBE participation as a percentage of the total contract price does not meet the applicable goal, then the Bidder must submit an Affidavit D to the City within three (3) business days after being notified by City Staff that it is the apparent low bidder. The Bidder must complete Affidavit D in its entirety on the City's form. In conjunction with the Affidavit D, the Bidder must include supplemental documentation of the good faith efforts made to meet the applicable goal. The City, in its discretion, may request that the Bidder submit additional information or documentation, including, but not limited to, information or documentation relating to any good faith efforts claimed by the Bidder, and completion of the City's Good Faith Negotiation Form and Solicitation Form. Good faith efforts can be demonstrated using, among other factors, the following:
 - i. Attending pre-solicitation or pre-bid meetings that are scheduled by the City to inform MWBE firms of contracting, subcontracting, and supply opportunities.
 - ii. Advertising in general circulation, trade association, or minority-focus media concerning subcontracting opportunities.
 - iii. Providing written notice, to a reasonable number of specific MWBE firms that their interest in the contract is being solicited, at least 10 days before bids are due, to allow MWBE firms time to participate.
 - iv. Following up initial solicitation of interest by contacting MWBE firms to determine with certainty whether the MWBE firms are interested.
 - v. Identifying and selecting portions of the work to be performed by MWBE firms in order to increase the likelihood of MWBE participation (including where appropriate, breaking down contracts into economically feasible units to facilitate MWBE participation).
 - vi. Providing interested MWBE firms with equal access to plans, specifications, and requirements of the contract.
 - vii. Negotiating fairly with interested MWBE firms, not rejecting MWBE firms as unqualified without sound reasons based on a thorough investigation of their capabilities.
 - viii. Using the services of the City's MWBE office; available minority community organizations; minority contractors' groups; local, state, and federal minority business offices; and other organizations that provide assistance in the recruitment and placement of MWBE firms.
 - ix. Assisting interested MWBE firms in need of equipment, loan capital, lines of credit or joint pay agreements to secure loans, supplies or letters of credit, including waiving credit that is ordinarily required.
 - x. Assisting interested MWBE firms in obtaining bonding, insurance, or providing alternatives to bonding or insurance for Subcontractors.
 - xi. Negotiating joint venture and partnership arrangements with minority businesses to increase the opportunities for minority participation when possible.
 - xii. Provide for quick pay agreements and policies to enable minority contractors and suppliers to meet cash flow demands.

For each unmet MWBE participation goal, for which an Affidavit D is submitted, a Bidder must earn at least fifty (50) good faith efforts points. The failure to achieve at least fifty (50) points is grounds for rejection of a bid. All

actions necessary to earn good faith efforts points must occur prior to bid opening. In determining whether a Bidder has made good faith efforts, the City will evaluate the efforts made by the Bidder and will determine compliance with regard to quantity, intensity, and results of these efforts prior to recommendation of award.

Post-Award

Payment

For purposes of this section the word "Contractor" means both the prime contractor and the CMAR for CMAR projects. The Contractor must submit a completed **Payment Affidavit - Subcontractor / Supplier Utilization Form** with each payment application, including periodic payments and final payment. Payment applications will not be processed by the City until a completed Payment Affidavit – Subcontractor/ Supplier Utilization Form is submitted. Within seven (7) days of receipt by the Contractor of a periodic or final payment from the City, the Contractor must pay each first-tier Subcontractor based on work completed or services provided under each subcontract. If the Contractor has made a quick pay commitment with any MWBE Subcontractor, they must comply with the provisions of their quick pay commitment.

Changing a Certified MWBE Subcontractor

If the situation arises that it becomes necessary to terminate, replace, or reduce the work of a MWBE Subcontractor counted toward a committed MWBE subcontracting goal, the Contractor must submit a completed **Request to Change MWBE Subcontractor** form to the applicable department project manager and the City's MWBE Program Manager. Any change in the work of a MWBE Subcontractor, including its termination and/or replacement, must first be approved by the City based upon good cause shown. Any further explanation or detail to the City in addition to what is identified in the Request to Change MWBE Subcontractor form must be on company letterhead. Good faith efforts shall apply to the selection of any substitute Subcontractor.

ACKNOWLEDGMENT OF MWBE POLICY

The City’s policy is to encourage bidders in the participation of MWBE businesses. A presentation of that policy has been made at the pre-bid or pre-proposal conference. By submission of a bid or proposal in response to this solicitation, the Bidder acknowledges consents to all the terms and conditions of the City of Raleigh Minority and Women-Owned Business Enterprise (MWBE) Policy. A copy of the policy may be provided upon request by the MWBE Program Office or online at www.raleighnc.gov.

Bidder recognizes that the City of Raleigh encourages and provides equal opportunity for MWBE businesses to participate in all aspects of the City’s contracting and procurement. The City’s MWBE participation aspirational goal is at least fifteen percent (15%) of the total contract amount to MWBEs on construction projects of \$300,000 or more and building related contracts of \$100,000 or more that include any State funding. The Bidder on the subject Contract/Proposal must document good faith efforts to provide meaningful participation by MWBEs in the performance of the Contract. Bidder agrees that the City may reject a bid for MWBE Policy violations, including but not limited to, providing inaccurate information or for failure to provide required MWBE documentation.

The Prime Contractor will be required to identify participation of MWBE businesses and how that participation will be achieved. Bidder must identify anticipated subcontractors, including any Minority & Women-Owned Businesses, intended to be used. Bidder further agrees, if awarded a Contract, it will, upon request, submit to the City, the proper affidavit identifying the workforce actually utilized on the Contract. All MWBE related bid documents have been provided to the Bidder. MWBE information provided by the Bidder is subject to the NC Public Records Act. Bidder acknowledges that the City must be notified of any change of subcontractors, suppliers, or subconsultants.

To the extent permitted by North Carolina law, the Bidder, their agents, officials, contractors, employees and servants agree not to discriminate in any manner on the basis of race, color, creed, national origin, sex, age, handicap, or sexual orientation with reference to the subject matter of this Contract/Proposal. The Bidder further agree, to the extent permitted by law, to conform with the provisions and intent of City of Raleigh Ordinance 1969-889, as amended. This provision is hereby incorporated herein for the benefit of the City of Raleigh and its residents, and may be enforced by action for specific performance, injunctive relief, or other remedy as provided by law. This provision shall be binding on the successors and assigns of the parties with reference to the subject matter of the Contract/Proposal.

I have read and understand the City of Raleigh’s MWBE policy.

Signature

Printed Name and Title

Company

Date

IDENTIFICATION OF MWBE PARTICIPATION

Formal Contracts & Construction Contracts Equal or Exceeding \$300,000

This Identification of MWBE Participation Form is for the purpose of capturing information regarding the utilization of MWBEs and other subcontractors and suppliers on Formally Bid City Contracts and Construction Contracts equal or exceeding \$300,000. MWBE participation is encouraged for all City of Raleigh contracting opportunities. Please refer to the City's MWBE Policy for any contract specific requirements. *Copy this Form as needed.*

BIDDER NAME			
PROJECT NAME	Roberts Park Dog Run		
PROJECT NUMBER	274-PR-ROBDOG-2023	CITY DEPARTMENT	PRCR
CONTRACT TYPE	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Services <input type="checkbox"/> Other _____*		
<input type="checkbox"/> PRIME IS MWBE	Classification: _____ <input type="checkbox"/> Certified with NCHUB <input type="checkbox"/> Certified with NCDOT-DBE	BID SUBMITTAL DATE	

MWBE Classifications: American Indian (AI), Asian American (AA), Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)
 *For Professional Services Contracts, please use the Identification of MWBE Participation for Professional Services Form

WORK TO BE SELF-PERFORMED

Check this box only if you intend to perform 100% of the work on this Project/Contract with your own current work forces, and you normally perform and have the capability to perform all elements of this work on this Project/Contract with your own current work forces.

MWBE SUBCONTRACTORS

Complete the chart below for all MWBE subcontractors that you intend to use on this Project/Contract regardless of dollar amount.

Company Name	MWBE Classification	Description of Services	Percentage of Total Contract*	Total Projected Utilization (\$)*

MWBE Classifications: American Indian (AI), Asian American (AA), Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)
 *If the proposal is subject to an RFQ process, you may enter "N/A".

Total Estimated MWBE Utilization* \$ _____

Total Proposal Amount* \$ _____

Percent Estimated MWBE Utilization* _____ %

(Total Estimated MWBE Utilization divided by Total Bid Amount)

*If the proposal is subject to an RFQ process, you may enter "N/A".

BID SUBMITTAL CHECKLIST

Complete sets of Bidding Documents shall be used in preparing bids; the City assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents. Each Bid shall be prepared on the Proposal Form provided in the Bid Documents.

The following items are required as part of each Bid Submittal:

Bid Proposal Forms

- Proposal Form with Base Bid, Alternates, and Owner's Contingency
- General and Subcontractor Names and License Numbers
- Unit Prices
- Acknowledgement of Addenda
- Proposal Signature Page
- Bidder Qualifications Form
- Additional Bidder Certification
- Contractor's Performance Policy Resolution

Minority and Women-Owned Business Enterprise (MWBE) Forms

- Acknowledgement of MWBE Policy
- Identification of MWBE Participation for Informal Project Bids

- Contractor Safety Record Questionnaire**

END OF BID SUBMITTAL CHECKLIST

PROCEDURE FOR REPORTING NORTH CAROLINA SALES TAX EXPENDITURES ON CITY OF RALEIGH CONTRACTS

1. The following procedure in handling the North Carolina Sales Tax is applicable to this project. Contractors shall comply fully with the requirements outlined hereinafter, in order that the owner may recover the amount of the tax permitted under the law.
2. (a) It shall be the general contractor's responsibility to furnish the owner documentary evidence showing the materials used and sales tax paid by the general contractor and each of his subcontractors. Any county sales tax included in the contractor's statements must be shown separately from the state sales tax. If more than one county is shown, each county shall be listed separately.

(b) The documentary evidence shall consist of a certified statement, by the general contractor and each of his subcontractors individually, showing total purchases of materials from each separate vendor and total sales taxes by each county paid each vendor. The certified statement must show the invoice number (s) covered and inclusive dates of such invoices. State sales tax shall be listed separately from county sales tax. If more than one county is shown, each county shall be listed separately.

(c) Materials used from general contractor's or subcontractor's warehouse stock shall be shown in a certified statement at warehouse stock prices.

(d) The general contractor shall not be required to certify the subcontractor's statements.

(e) The documentary evidence to be furnished to owners eligible for sales or use tax refunds covers sales and/or use taxes paid on building materials used by contractors and subcontractors in the performance of contracts with churches, orphanages, hospitals not for profit, educational institutions not operated for profit and other charitable or religious institutions or organizations not operated for profit and incorporated cities, towns and counties in this State. The documentary evidence is to be submitted to the above-named institutions, organizations and governmental units to be included in claims for refunds to be prepared and submitted by them to obtain refunds provided by G.S. 105-164.14 and is to include the purchase of building materials, supplies, fixtures and equipment which become a part of or annexed to buildings or structures being erected, altered or repaired under contracts with such institutions, organizations or governmental units.
3. The contractor or contractors to whom an award is made on this project will be required to follow the procedure outlined above.
4. The contractor is advised that all requests for payment, partial or final, for work completed under this contract must include a sales tax report submitted in accordance with the procedures outlined above.

NORTH CAROLINA
WAKE COUNTY

CONTRACT FOR CONSTRUCTION/REPAIR

THIS CONTRACT (the "Contract") is entered into by and between _____, hereinafter referred to as the "Contractor", and the City of Raleigh, a North Carolina municipal corporation, hereinafter referred to as the "City" for the project entitled: Moore Square Park Dog Run.

And for the not to exceed total Contract Amount of: _____ (in written word and numerals), unless changed by a duly authorized amendment or change order.

WITNESSETH:

WHEREAS, the City desires to procure a contractor to perform services; and

WHEREAS, the City has completed necessary steps for retention of construction/repair services under State law and applicable City policies; and

WHEREAS, the City has agreed to engage the Contractor, and the Contractor has agreed to contract with the City, for performance of services as described, and according to the further terms and conditions, set forth herein.

NOW THEREFORE, in consideration of sums to be paid to the Contractor, and other good and valuable consideration, the Contractor and City do contract and agree as follows:

1. Description of Work

The Contractor, at its own proper cost and expense and with skill and diligence, shall furnish all labor, tools, materials and equipment and do all things necessary for the proper construction and completion ready for use of the following improvements:

- Construction of new concrete pad for a vestibule, steel fencing and gates, and site improvements within Moore Square Park at 201 S. Blount Street, Raleigh, NC, a City of Raleigh public park.

In strict accordance with and as shown in the specifications, schedules, drawings and other documents set forth herein or incorporated by reference as follows:

- Construction Documents Plans for Moore Square Park Dog Run, dated July, 2025
- Project Manual for Moore Square Dog Run, dated July, 2025.

The Contractor shall further perform in accordance with the directions (not inconsistent therewith) given from time to time during the construction by the project engineer or of such other official, employee, or other agent of the City as the City may designate.

2. General Obligations of the Contractor

The Contractor will accept the prices specified in this Contract in full compensation and satisfaction for the performance of this Contract and as consideration of this Contract. The Contractor shall be responsible for all loss and damages of every kind and nature which may arise out of or an account of the performance of the work required by this Contractor, and for all risks of every description connected with the said work;

and the Contractor shall be responsible for well and faithfully completing the whole work according to all applicable plans and specifications and the terms and conditions of this Contract.

3. Time of Commencement and Completion

The entire work required by this Contract shall be completed by the Contractor not later than _____ days after the date of Notice-to-Proceed.

4. Workmanship and Quality of Services/Warranties

All work under this Contract shall be done and performed to the satisfaction of the project engineer of the City of Raleigh, or of such other official, employee, or agent of the City as may be designated by the City, and such official, employee or agent designated by the City shall in all cases of dispute determine the quantity, quality, acceptability and fitness of the work and materials and of several portions thereof which are to be paid for under this Contract and shall decide and determine all questions which may arise as to the measurements, lines, levels and dimensions of the work and all questions respecting the true construction, interpretation or meaning of the plans and specifications. In case of dispute between the Contractor and the said official, employee, or agent of the City, the decision and determination of the latter shall be taken and shall be final and conclusive.

- 4.1. The Contractor, in executing this Contract, warrants that it will be responsible for the maintenance or correction of any work completed under this Contract that may become defective due to faulty workmanship or materials for a period of one (1) year after final acceptance of the work performed.
- 4.2. It is understood and agreed by the parties hereto that work done under this Contract shall be subject to all ordinances of the City of Raleigh relating to work done in the public streets or other public property of the City. Particularly reference is made to the provisions of Part 11, Chapter 6 of the Raleigh City Code.

5. Compensation

In consideration of the performance of this Contract and the full completion of the work required of the Contractor by the terms and conditions of this Contract, the City agrees to pay to the Contractor the contract amount based on the following:

- 5.1. Partial payments will be made to the Contractor by the City NET thirty (30) days after presentation of a true and accurate payment application to the City as certified by the Project Engineer or agent of the City.
- 5.2. All invoices must include the following Purchase Order Number _____.
- 5.3. Final estimate of the amount due to the Contractor will be made within thirty (30) days after the certified completion and final acceptance of all the work required by the Contract less retainage per Section 6. Payment to the Contractor by the City of the amounts so determined to be due, in accordance with this Contract, shall relieve the City from all claims for work done and materials and equipment furnished under this Contract.
- 5.4. It is further mutually agreed between the parties that no estimate or partial payment made under this Contract shall be conclusive evidence of the performance of this Contract, either

wholly or in part, and that no such payment shall be construed to be an acceptance of defective work or improper materials.

6. Retainage

This section will only apply if this public construction contract pertains to a project in which the total project costs are equal to or greater than one hundred thousand dollars (\$100,000.00).

To ensure proper performance of the Contract, the City may retain five percent (5%) of the amount of each approved partial or periodic payment application until the project work is fifty percent (50%) complete, provided that the Contractor continues to perform satisfactorily and any non-conforming work identified in writing prior to that date has been corrected by the Contractor and accepted by the construction manager.

If the City determines the Contractor's performance is unsatisfactory, the City may reinstate retainage in the amount of five percent (5%) for each subsequent partial or periodic payment application until the Contractor's performance becomes satisfactory. The project shall be deemed fifty percent (50%) complete when the contractor's gross project invoices, excluding the value of materials stored off-site, equal or exceed fifty percent (50%) of the value of the contract, except the value of materials stored on-site shall not exceed twenty percent (20%) of the contractor's gross project invoices for the purpose of determining whether the project is fifty percent (50%) complete. Following fifty percent (50%) completion of the project, the City may also withhold additional retainage from any subsequent periodic payment, not to exceed five percent (5%), in order to allow the City to retain two and one-half percent (2 ½%) total retainage through the completion of the project.

Within sixty (60) days after the submission of a pay request, the City with written consent of the surety shall release to the Contractor all retainage on payments held by the City if (1) the City receives a certificate of substantial completion from the architect, engineer, or designer in charge of the project; or (2) the City receives beneficial occupancy or use of the project. However, the City may retain sufficient funds to secure completion of the project or corrections on any work. If the City retains funds, the amount retained shall not exceed two and one-half (2 ½) times the estimated value of the work to be completed or corrected. Any reduction in the amount of the retainage on payments shall be with the consent of the contractor's surety.

Retainer provisions contained in Contractor's subcontracts may not exceed the terms and conditions for retainage provided herein. Contractors are further required to satisfy the retainage provisions of N.C.G.S. 143-134.1(b2) with regard to subcontracts for early finishing trades (structural steel, piling, caisson, and demolition) and to coordinate the release of retainage for such trades from the retainage held by the City from the Contractor pursuant to statute. Nothing shall prevent the City from withholding payment to the Contractor in addition to the amounts identified herein for unsatisfactory job progress, defective construction not remedied, disputed work, or third-party claims filed against the City or reasonable evidence that a third-party claim will be filed.

7. Notices

Except as otherwise expressly provided in this Contract, all notices, requests for payment, or other communications arising hereunder shall be sent to the following:

City of Raleigh

Attn:

Title:

Address 1: P.O. Box 590

Address 2: Raleigh, NC 27602

Contractor

Attn:

Title:

Address 1:

Address 2:

Telephone:
E-mail:

Telephone:
E-mail:

8. Non-Discrimination

- 8.1. To the extent permitted by North Carolina law, the Parties for themselves, their agents, officials, directors, officers, members, representatives, employees, and contractors agree not to discriminate in any manner or in any form based on actual or perceived age, mental or physical disability, sex, religion, creed, race, color, sexual orientation, gender identity or expression, familial or marital status, economic status, veteran status or national origin in connection with this Contract or its performance.
- 8.2. The Parties agree to conform with the provisions and intent of Raleigh City Code §4-1004 in all matters related to this Contract. This provision is incorporated into the Contract for the benefit of the City of Raleigh and its residents and may be enforced by an action for specific performance, injunctive relief, or any other remedy available at law or equity. This section shall be binding on the successors and assigns of all parties with reference to the subject matter of the Contract.

9. Minority and Women Owned Business Enterprise

The City of Raleigh prohibits discrimination in any manner against any person based on actual or perceived age, race, color, creed, national origin, sex, mental or physical disability, sexual orientation, gender identity or expression, familial or marital status, religion, economic status, or veteran status. The City maintains an affirmative policy of fostering, promoting, and conducting business with women and minority owned business enterprises.

To further this policy, the City has an aspirational goal of 15% participation by certified minority and women-owned businesses in City construction and repair contracts for building projects with a cost of \$300,000 or more or building projects with a cost of \$100,000 or more with state funding.

10. Assignment

This Contract may not be assigned without the express written consent of the City.

11. Applicable Law

All matters relating to this Contract shall be governed by the laws of the State of North Carolina, without regard to its choice of law provisions, and venue for any action relating to this Contract shall be Wake County Civil Superior Court or the United States District Court for the Eastern District of North Carolina, Western Division.

12. Insurance

Contractor agrees to purchase at its own expense insurance coverages to satisfy the following minimum requirements. A certificate reflecting the following minimum coverages shall accompany this Contract:

12.1. Workers' Compensation Insurance:

Limits:

Workers Compensation:	Statutory for the State of North Carolina
Employers Liability:	Bodily Injury by Accident \$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 policy limit
Bodily Injury by Disease	\$1,000,000 each employee

12.2. Commercial General Liability:

Limits:

Each Occurrence:	\$1,000,000
Personal and Advertising Injury	\$1,000,000
General Aggregate Limit	\$2,000,000
Products and Completed Operations Aggregate	\$2,000,000

The aggregate limit must apply per project. The form of coverage must be the ISO CG 00 01 policy as approved by the State of North Carolina Department of Insurance. If a form of coverage other than the CG 00 01 is used it must be approved by the City's risk manager. Any endorsed exclusions or limitations from the standard policy must be clearly stated in writing and attached to the Certificate of Insurance. Completed Operations coverage must be maintained for the period of the applicable statute of limitations.

12.3. Commercial Automobile Liability:

Limits:

\$1,000,000 combined single limit.

12.4. Additional Insured:

Contractor agrees to endorse the City as an Additional insured on the Commercial General Liability, Auto Liability and Umbrella Liability if being used to meet the minimum liability limits for General Liability and Automobile Liability.

The Additional Insured shall read 'City of Raleigh is named additional insured as their interest may appear'.

The Certificate Holder address should read:

City of Raleigh
Post Office Box 590
Raleigh, NC 27602-0590

12.5. Builders Risk Coverage:

Limits:

Minimum limit in the amount of total bid price. The Builder Risk policy must be endorsed to increase the limit of insurance for all change orders.

12.6. Policy Form:

Builder Risk coverage must be on a direct physical loss basis and contain no exclusion for theft, collapse or damage to foundations or underground structures, pipes or conduits.

12.7. Named Insured:

The Named Insured shall be The City of Raleigh, the Contractor, and all sub-contractors with a contractual assumption of responsibility for damage to the project.

All insurance companies must be admitted to do business in North Carolina and be acceptable to the City's risk manager. If the insurance company(s) is a permitted surplus lines insurer, the insurance company name, and NAIC number must be submitted to the City's risk manager for approval before

commencing work. Contractor shall be required to provide the City no less than thirty (30) days' notice of cancellation, or any material change, to any insurance coverage required by this Contract.

A Certificate of Insurance (COI) must be issued by an authorized representative of the insurance carrier(s). Certificates of Insurance must have the insurance company name and NAIC number clearly identified. The acceptance of or the review of Certificates of Insurance by the City does not relieve Contractor of any requirements in the Contract to provide specific insurance coverage required by the Contract, nor does the acceptance of or review of Certificates of Insurance covenant all insurance requirements have been met.

13. Surety Bonds

If Surety Bonds are required by the City for this project, the Contractor shall have furnished and attached hereto a performance bond and a payment bond each in the penal sum of the full Contract amount covering the faithful performance of the Contract and the payment of all obligations arising hereunder, in such form and content as the City may prescribe and with surety approved by the City. Should any surety upon the bond for the performance of this Contract become unacceptable to the City, the Contractor must promptly furnish additional security as may be required from time to time by the City to protect the interests of the City and of persons, firms and corporations supplying labor or materials in the performance of the work contemplated by the Contract.

14. Indemnity

- 14.1. To the fullest extent allowed by law, Contractor shall indemnify, defend, and hold harmless the City, its officers, officials, employees, agents, or indemnities (collectively called "Indemnified Parties") from and against those Losses, liabilities, damages, and costs proximately caused by, arising out of, or resulting from the sole negligence of the Contractor, the Contractor's agents, or the Contractor's employees.
- 14.2. In matters other than those covered by subsection 14.1. above, and to the fullest extent allowed by law, Contractor shall indemnify, defend, and hold harmless the Indemnified Parties from and against those Losses, liabilities, damages, and costs caused by, arising out of, resulting from, or in connection with the execution of the work provided for in this Agreement when the Fault of the Contractor or its Derivative Parties is a proximate cause of the Loss, liability, damage, or expense indemnified.
- 14.3. Costs and expenses shall include attorneys' fees, litigation or arbitration expenses, or court costs actually incurred by the Indemnified Parties to defend against third-party claims alleged in any court, tribunal, or alternative dispute resolution procedure required of any of the Indemnified Parties by law or by contract, only if the Fault of the Contractor or its Derivative Parties is a proximate cause of the attorney's fees, litigation or arbitration expenses, or court costs to be indemnified.
- 14.4. The Contractor's duty to indemnify, defend, and hold harmless described hereinabove shall survive the termination or expiration of this Contract.
- 14.5. Definitions:
 - 14.5.1. For the purposes of this Section 14, the term "Fault" shall mean any breach of contract; negligent, reckless, or intentional act or omission constituting a tort under

applicable statutes or common law; or violation of applicable statutes or regulations.

14.5.2. For the purposes of this Section 14, the term “Loss” or “Losses” shall include, but not be limited to, fines, penalties, and/or judgments issued or levied by any local, state, or federal governmental entity.

14.5.3. For the purposes of this Section 14, the term “Derivative Parties” shall mean any of the Contractor’s subcontractors, agents, employees, or other persons or entities for which the Contractor may be liable or responsible as a result of any statutory, tort, or contractual duty.

15. Communications

If communications to the public and/or City employees are required as part of the Contractor’s scope of work under this Contract, then the Contractor shall work with the City in the development of a communications plan (“Communications Plan”) that must first be approved by the City in writing before any such communications are delivered to the public and/or City employees.

For purposes of this Section 15, such written approval by the City shall be provided by electronic mail by the applicable City Communications Department employee who is responsible for reviewing and approving the Communications Plan, such electronic mail to be sent to the electronic mail address listed in Section 7, above, as part of the contact information for the Contractor representative identified in Section 7, above.

Among other things, the Communications Plan must establish whether the City or the Contractor will be responsible for sending any such communications to the public and/or City employees as required either by this Contract or the Communications Plan. The Communications Plan also shall include, but not be limited to, communications objectives, target audience, and deliverables (print, video, website, social, direct, or digital). The Contractor shall comply with the Communications Plan when communicating to the public and/or City employees pursuant to this Contract and the Communications Plan. All such communications shall comply with the City’s brand and communications guidelines, as the same may be amended or modified from time to time.

The City’s current brand and communications guidelines are incorporated into this Contract by reference and can be found on the City’s website here: <https://raleighnc.gov/doing-business/city-brand-guidance-vendors>.

For purposes of this Section 15, “Communications” is defined as any public or City employee facing information presented in channels such as, but not limited to, a website, mobile applications, social media, printed materials, vehicles, billboards, and videos.

15.1. Communications Plan Approval:

Any materials, messaging or outreach from the Contractor related to marketing and communications of any service or effort under this Contract must first be reviewed and approved by the City’s Communications Department. This is to ensure that the Communications Plan: (i) complies with the City’s brand and communication guidelines; (ii) integrates with the City’s other communications channels and digital strategy; (iii) meets

accessibility guidelines; and (iv) conforms to communications best practices with respect to general user experience.

15.2. Accessibility Requirements:

For web content that the Contractor is to make accessible to the public and/or City employees as part of an approved Communications Plan that is included in the Contractor's scope of work under this Contract, all web materials including, but not limited to, tools, mobile applications, and websites, generated by, or on behalf of, the Contractor must meet at least the mid-range conformance level, AA compliance of the current Web Content Accessibility Guidelines, as the same may be amended from time to time.

Any such web content generated by, or on behalf of the Contractor, as part of a Communications Plan associated with this Contract shall meet all standards of good cognitive web accessibility, which include the following:

15.2.1. Using proper headings and lists

15.2.2. Using unique links

15.2.3. Using alternative text and captions

15.2.4. Using more white space

15.2.5. Dividing content into more manageable pieces

15.2.6. Making forms manageable by breaking them into multiple, sequential steps

15.2.7. Providing a logical reading order

15.2.8. Being consistent with fonts, colors and locations of page elements

15.2.9. Offering keyboard access

15.2.10. Offering content in multiple formats

15.2.11. Understanding minimum contrast

15.3. Languages:

Digital sites/ tools that are for public use/consumption, including for use by City employees, under a Communications Plan associated with this Contract must have translation module (e.g., G-translate, Weglot) so that the service is available in all languages. At minimum, Spanish translation is required on all such digital sites/tools based on low English proficiency requirements:

15.3.1. In most cases, entities that are recipients of federal financial assistance through U.S. Department of Health and Human Services (HHS) must provide language assistance services in order to comply with their legal obligation to take reasonable steps to ensure meaningful access to their programs by persons with Limited English Proficiency (LEP).

15.4. Content:

For any communications content that the Contractor is required to generate, or have generated, as part of its scope of work under this Contract, the Contractor shall send such content to City Communications Department staff in raw, high-resolution format for inclusion in communications materials to be made accessible to the public and/or City employees as set forth in the Communications Plan that arises from this Contract (i.e., websites, mobile applications, printed materials collateral, and social media). PDF attachments shall be used only as a last resort and only after written approval by the City, with such written approval to be provided by the City in electronic mail format as described elsewhere in this Section 15.

15.4.1. Contractor shall only provide to the City communications materials for which the City has rights to use, with written documentation of such use rights being provided to the City as requested from time to time by the City in its sole discretion.

15.4.2. All working files agreed upon for the specific Communications Plan shall be provided to the City Communications Department, i.e., text, graphics, charts and data, infographics, and original native files such as Illustrator, Excel, ArcGIS, etc. Following are the file format specifications:

15.4.2.1. Images: At least 300dpi for printing at actual size; 96dpi and at least 1920x1080px for digital/Web.

15.4.2.2. Video: Any video should be no less than Standard HD (1920x1080) but preferable 4k.

15.4.2.3. Text: Word document using accessibility best practices (heading structure, table of contents, and tables).

16. Advertising

The Contractor shall not use the existence of this Contract, or the name of the City, as part of any advertising without prior written approval of the City.

17. Acknowledgement of City Brand and Tree Logo Ownership and Restrictions

The City of Raleigh has developed proprietary branding (the “City Brand”) centered around the Raleigh tree mark logo (the “Tree Logo”). The City’s exclusive rights and ownership in and to the Tree Logo are protected under trademark and copyright, including U.S. Copyright Reg. No. VAu1-322-896, N.C. State Trademark Registration Reg. No. T-23070 and Federal Trademark Registration Reg. No. 5,629,347, as well as under other federal and state laws.

Contractor acknowledges and understands that the City is not conferring any license to Contractor under this Agreement to use or depict the Tree Logo or other aspects of the City Brand. Contractor shall not make any use or depiction of the Tree Logo or other aspects of the City Brand without the prior express written approval of the City. In this regard, should any materials being produced by Contractor for the City under this Agreement contemplate use or depiction of the Tree Logo, including, but not limited to, printed materials, digital media, signage and/or display materials, Contractor shall proceed under the auspices and direction of the City’s Communications Department and shall comply with all guidelines and restrictions governing use or depiction of the Tree Logo.

18. Force Majeure

Except as otherwise provided in any environmental laws, rules, regulations or ordinances applicable to the parties and the services performed under this Contract, neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations by an act of war, hostile foreign actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God. Either party to the Contract must take reasonable measures and implement reasonable protections when a weather event otherwise defined as a force majeure event is forecast to be eligible to be excused from the performance otherwise required under this Contract by this provision.

19. Termination

If the Contractor fails to perform the work described herein by the time allowances provided in Section 3 or fails to provide adequate staff and resources required to properly execute said work in a workmanlike and safe manner, the City can declare the Contractor in Default. If the Contractor fails to complete the work in the provided project duration as stated in Section 3 of this Contract, or fails to meet periodic schedules describing work sequence, or fails to comply with all appropriate local, federal, or state laws, rules and regulations, then the City may, without prejudice to any other right or remedy and after giving the Contractor and its surety a maximum of seven (7) days from delivery of a written notice, declare the Contract in default, take possession of the project and of all equipment, tools, materials thereon owned by the Contractor and call upon the surety or appropriate legal recourse to finish the work by whatever method deemed expedient.

20. Laws/Safety Standards

- 20.1. The Contractor shall comply with all laws, ordinances, codes, rules, regulations, safety standards and licensing requirements that are applicable to the conduct of its business, including those of federal, state, and local agencies having jurisdiction and/or authority.
- 20.2. All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate state inspector which customarily requires the label or re-examination listing or identification marking of the appropriate safety standard organization, such as the American Society of Mechanical Electrical Engineers for pressure vessels; the Underwriters' Laboratories and/or National Electrical Manufacturers' Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type(s) of devices offered and furnished. Further, all items furnished by the Contractor shall meet all requirements of the Occupational Safety and Health Act (OSHA), and state and federal requirements relating to clean air and water pollution.
- 20.3. Contractor must comply with *North Carolina Occupational Safety and Health Standards for General Industry 13 NCAC 07F (29CFR 1910)*. In addition, Contractor shall comply with all applicable occupational health and safety and environmental rules and regulations.
- 20.4. Contractor shall effectively manage its safety and health responsibilities including:
 - 20.4.1. Accident Prevention:

Prevent injuries and illnesses to its employees and others on or near the job site. Contractor managers and supervisors shall ensure personnel safety by strict adherence to established safety rules and procedures.

20.4.2. Environmental Protection:

Protect the environment on, near, and around the work site by compliance with all applicable environmental regulations.

20.4.3. Employee Education and Training:

Provide education and training to all contractors employees before they are exposed to potential workplace or other hazards as required by specific OSHA Standards.

21. Applicability of North Carolina Public Records Law

Notwithstanding any other provisions of this Contract, this Contract and all materials submitted to the City by the Contractor are subject to the public records laws of the State of North Carolina and it is the responsibility of the Contractor to properly designate materials that may be protected from disclosure as trade secrets under North Carolina law as such and in the form required by law prior to the submission of such materials to the City. Contractor understands and agrees that the City may take any and all actions necessary to comply with federal, state, and local laws and/or judicial orders and such actions will not constitute a breach of the terms of this Contract. To the extent that any other provisions of this Contract conflict with this section, the provisions of this section shall control.

22. Miscellaneous

- 22.1. The Contractor shall be responsible for the proper custody and care of any property furnished or purchased by the City for use in connection with the performance of this Contract and will reimburse the City for the replacement value of its loss or damage. The Contractor shall keep the job sites and surrounding area reasonably free from rubbish at all times and shall remove debris from the site from time to time or when directed to do so by the City. Before final inspection and acceptance of the project, the Contractor shall thoroughly clean the job sites, and completely prepare the project and site for use by the City.
- 22.2. The Contractor shall be considered to be an independent contractor and as such shall be wholly responsible for the work to be performed and for the supervision of its employees. Nothing herein is intended or will be construed to establish any agency, partnership, or joint venture. Contractor represents that it has, or will secure at its own expense, all personnel required in performing the services under this Contract. Such employees shall not be employees of or have any individual contractual relationship with the City.
- 22.3. This Contract may be amended only by written agreement of the parties executed by their authorized representatives.

23. Right of Audit and Examination of Records

- 23.1. The City may conduct an audit of any services performed and fees paid subject to this Contract. The City, or its designee, may perform such an audit throughout the contract period and for three (3) years after termination thereof or longer if otherwise required by law.

- 23.2. The Contractor and its agents shall maintain all books, documents, papers, accounting records, contract records and such other evidence as may be appropriate to substantiate costs incurred under this Contract. The City, or its designee, shall have the right to, including but not limited to: review and copy records; interview current and former employees; conduct such other investigation to verify compliance with Contract terms; and conduct such other investigation to substantiate costs incurred by this Contract.
- 23.3. "Records" shall be defined as data of every kind and character, including but not limited to books, documents, papers, accounting records, contract documents, information, and materials that, in the City's sole discretion, relate to matters, rights, duties or obligations of this Contract.
- 23.4. Records and employees shall be available during normal business hours upon advanced written notice. Electronic mail shall constitute written notice for purposes of this section.
- 23.5. Contractor shall provide the City or its designee reasonable access to facilities and adequate and appropriate workspace for the conduct of audits.
- 23.6. The rights established under this section shall survive the termination of the Contract, and shall not be deleted, circumvented, limited, confined, or restricted by contract or any other section, clause, addendum, attachment, or the subsequent amendment of this Contract.
- 23.7. The Contractor shall reimburse the City for any overcharges identified by the audit within ninety (90) days of written notice of the City's findings.
- 23.8. If an audit discloses overpricing or overcharges by the Contractor or Subcontractor in excess of one percent (1%) of the total contract billings, the Contractor shall reimburse the City for the cost of the audit.
- 23.9. Contractor shall ensure that all contracts with any subcontractors provide the City with an equivalent right to audit as contained herein.
- 23.10. Contractor shall, upon request, provide any records associated with this engagement to the North Carolina State Auditor that are necessary to comply with the provisions of G.S. § 147-64.7.

24. Incorporation of Documents/Complete Agreement

This Contract, and any documents incorporated below, represent the entire Contract between the parties and suspend all prior oral or written statements, agreements or Contracts.

Specifically incorporated into this Contract are the following attachments, or if not physically attached, are incorporated fully herein by reference:

- Bid Advertisement/City-issued bid document
- Contractor's Bid-response document
- Procedure for N.C. Sales Tax Reporting
- Performance Bond (w/Power-of-Attorney)
- Payment Bond (w/Power-of-Attorney)
- Certificate of Insurance

- General Conditions
- Special or Supplemental Conditions
- Job Specifications
- SDMWOB Affidavits/documentation
- Other (Describe) _____

In case of conflict between this Contract and any of the incorporated attachments or references listed above, the terms of this Contract shall prevail.

25. E – Verify

Contractor shall comply with *E-Verify*, the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law and as in accordance with N.C.G.S. §64-25 *et seq.* In addition, to the best of Contractor’s knowledge, any subcontractor employed by Contractor as a part of this contract shall be in compliance with the requirements of E-Verify and N.C.G.S. §64-25 *et seq.* In cases of conflict between this Contract and any of the above incorporated attachments or references, the terms of this Contract shall prevail.

26. Iran Divestment Act Certification

Contractor certifies that, as of the date listed below, it is not on the final divestment list as created by the State Treasurer pursuant to N.C.G.S. § 147-86.55, *et seq.* In compliance with the requirements of the Iran Divestment Act and N.C.G.S. § 147-86.59, Contractor shall not utilize in the performance of the Contract any subcontractor that is identified on the final divestment list.

27. Companies Boycotting Israel Divestment Act Certification

Contractor certifies that it has not been designated by the North Carolina State Treasurer as a company engaged in the boycott of Israel pursuant to N.C.G.S. 147-86.81.

The remainder of this page is left blank intentionally.

IN WITNESS WHEREOF, the parties hereto have executed this Contract by digital signature, under seal, on the respective dates below, and this Contract shall be effective upon the date of the City's signature.

CONTRACTOR:

CITY:

CITY OF RALEIGH
a North Carolina municipal corporation

By:

By:

_____(SEAL)
Signature

Signature

Name

Name

Title

Choose an item.

Title

Choose an item.

Department

Date of Signature

Date of Signature

ATTEST:

ATTEST:

Signature

_____(SEAL)
City Clerk (or designee)

Name

Title

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

Chief Financial Officer (or designee)

City of Raleigh Contract ID Number xxxxxxxxxxxx

GENERAL CONDITIONS

INDEX TO GENERAL CONDITIONS

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DEFINITIONS OF TERMS

Wherever used in the Contract Documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

"Addenda" shall mean written or graphic instruments issued prior to the execution of the agreement, which modify or interpret the Contract Documents by additions, deletions, clarifications, or corrections.

"Allowance" shall mean any amount specified and included in an agreed-upon construction scope of work for a certain item of work whose details are not yet determined at the time of agreement between the contractor and the Owner for such scope of work.

"Architectural Supplemental Instructions" shall mean the information that allows an architect to provide additional instructions or make minor changes without having to re-work the entire construction plan.

"Authorization Request" shall mean the final action in approving a cost or change event. It may result in a change in the project's cost of work, general conditions or overheads, contingency, or other item which is included in the contract amount.

"Bad Weather Day" shall mean a day when construction Work cannot be performed and is attributable to unusual weather phenomena as defined herein.

"Bid" shall mean the offer or Proposal of the Bidder submitted on the prescribed form setting forth the price(s) for the Work to be performed.

"Bidder" shall mean any person, firm, or corporation submitting a Bid for the Work.

"Bonds" shall mean Bid, Performance, and Payment Bonds and other instruments of security, furnished by the Contractor and the Contractor's surety in accordance with the Contract Documents.

"Change Order" shall mean the adjustment of the contract of time, or addition or deduction to the overall contract price. A Change Order shall be an amendment to the contract and requires approval by the City of Raleigh through the City Council or City Manager.

"Change Order Directive (COD)" shall mean an instrument used to provide written notice for the Contractor to proceed with the work directed by the Designer or Owner prior to issuance of a formal request for change proposal or change agreement by the Contractor.

"Consultant" shall be defined as the professional services firm employed by the City or Owner.

"Contract Documents" shall consist of Advertisement for Bids, Proposal, Bid Bond, Contract, Contract Performance Bond, Payment Bond, Instructions to Bidders, General Requirements, General Conditions, Supplementary Conditions, Technical Specifications, Certificates of Insurance, and Drawings and any other pertinent documents. The intent of these documents is to include all materials, appliances, tools, labor, and services of every kind necessary for the proper execution of the Work, and the terms and conditions of payment therefore. The Contract Documents shall be considered as one, and whatever is called for by any one of them shall be as binding as if called for by all.

"Contract Price" shall mean the total monies payable to the Contractor under the terms and conditions of the Contract Documents.

"Contract Time" shall mean the number of calendar days stated in the Contract Documents for the completion of the Work.

"Contractor" or "General Contractor" shall mean the individual, firm, or corporation undertaking the execution of the Work as an independent Contractor under the terms of the Contract and acting through its agents or employees.

"Cost or Change Event" shall mean a directive to perform work resulting from a proposed change. There may or may not be costs associated with the work. It is initiated as a proposal from the Contractor and sent to the Designer for review. If approved by the Designer, the Designer forwards it to the Owner as a recommendation from the Designer in the form of an Authorization Request.

"Change Order" means a written order to the Contractor and/or any amendments to the contract that authorize a change in the contract time/schedule or contract amount. **"City"** shall mean City of Raleigh.

"Designer" shall mean the professional architectural and/engineering firm and/or its subconsultants that are responsible for the project design and have placed their professional seals on the construction documents. Can also be noted as "Engineer".

"Drawings" shall mean the part of the Contract Documents, which show largely through graphical presentation the characteristics, design and scope of the Work to be performed and which have been prepared or approved by the City.

"Final Acceptance" shall be defined as concurrence between the Designer and the Owner to accept the project from the contractor. Final acceptance of the project shall not be considered before the final inspection is conducted. Final acceptance does not infer the lack of claims on a project.

"Liquidated Damages" shall mean the amount reasonably estimated in advance to cover the consequential damages associated with the City's economic loss in not having the use of the project for its intended purposes resulting from the Contractor's failure to complete the project by the completion date.

"Modification" shall mean the process of incorporating agreed changes or alterations made to a contract. A contract modification may introduce, revise or cancel specifications, delivery period, price, quantity or terms of an existing contract, while leaving its overall purpose and effect intact.

"Notice of Award" shall mean the written notice to the successful bidder of the acceptance of the bid as approved by the City Council. Notice may be issued in person or via regular mail, certified mail with receipt of delivery, or email with receipt of delivery.

"Notice to Proceed" shall mean written communication issued by the City or its Designer to the Contractor authorizing him to proceed with the Work and establishing the date of commencement of the Work. Notice may be issued in person or via regular mail, certified mail with receipt of delivery, or email with receipt of delivery.

"Owner" shall mean City of Raleigh.

"Owner's Contingency" shall mean the amount of funds included in the contract that represents the Owner's best estimate of funds to provide for allowances and to address unforeseen circumstances or other conditions that may arise during the construction of the project.

"Owner-Requested Change" is a change in, addition to, and/or reduction of the construction Work requested by the Owner necessitating an adjustment to a GMP, the date for Substantial Completion, or both. The document by which the CMAR proposes an adjustment to a GMP, the date for Substantial Completion, or both, in response to an Owner-Requested Change is a Change Order Proposal.

"Project" shall mean the undertaking to be performed as provided in the Contract Documents.

"Project Manager" shall be the individual or individuals assigned to coordinate the project and insure that City procedures are followed, and the quality of Work is up to the standards expected.

"Request for Proposal" shall mean an offer by a contractor, in response to a request issued by the Designer or Owner for the purpose of requesting an equitable adjustment for a proposed change to an existing contract.

"Shall" is mandatory; "may" is permissive.

"Shop Drawings" shall mean all drawings, diagrams, illustrations, brochures, schedules, and other data, which are prepared by the Contractor, Subcontractor, manufacturer, Supplier, or distributor, which illustrate how specific portions of the Work shall be fabricated or installed.

"Specifications" shall mean a part of the Contract Documents consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards, and Workmanship specified for this Project.

"Subcontractor" shall mean an individual, firm, or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work at the site.

"Substantial Completion" shall mean that date determined by the City when the construction of the Project or an expressly stipulated part thereof is sufficiently completed, in accordance with the Contract Documents, so the Project or stipulated part can be fully utilized for the purposes for which it is intended.

"Supplemental General Conditions" shall mean a part of the Contract Documents consisting of modifications or additions to the General Conditions.

"Superintendent" shall mean the Contractor's authorized on job representative designated in writing by the Contractor prior to commencement of any Work

"Supplier" shall mean any person, supplier, or organization who furnishes materials or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site.

"Surety" shall mean the bonding or insurance company that represents the Contractor and that assumes responsibility for the completion of the project should the Contractor, for any reason, become unable to complete the project.

"Time Extension" shall mean an increase in the length of time specified in a contract resulting in a revised contract completion date.

"Work" of the Contractor or Subcontractor shall include all labor, material, equipment, transportation, skill, tools, machinery, and other equipment and things useful or necessary in order to complete the Contract.

“**Written Notice**” shall mean the notification either in handwritten, computer generated, typed, or email form that communicates information or directives.

1. APPLICABLE REQUIREMENTS

The Work shall comply with the Contract Documents and with all applicable codes, laws, and regulations of the City, State, or Federal agencies. In the event of any conflict between the terms of this Contract and such codes, laws, and regulations, the codes, laws, and regulations shall prevail. If the Contractor performs any Work contrary to such codes, laws, or regulations the Contractor shall assume full responsibility therefore and shall bear any and all costs necessary to correct the Work.

2. CONTRACT BID GUARRANTY AND SECURITY

BID GUARRANTY: Bidders shall furnish a bid guaranty in the form of cash, a certified cashier's check issued by a responsible bank or trust company insured by the Federal Deposit Insurance Corporation, made payable to the City of Raleigh, or a Bid Bond issued by a surety licensed to conduct business in the state where the Project is located. The amount of such guaranty shall be equal to 5% of the bid price. The Bid security of the successful Bidder will be retained until the Contractor has executed the Contract and furnished the required Contract security, whereupon it will be returned; if the Contractor fails to execute and deliver the Contract and furnish the required Contract security within ten (10) calendar days of the Notice of Award, Owner may annul the Notice of Award and the Bid security of the Bidder will be forfeited. The Bid security of any other Bidder who the Owner believes to have a reasonable chance of receiving the Award may be retained by Owner until the earlier of (1) the seventh day after the executed Contract is delivered by the Owner to Contractor and the required Contract security is furnished or (2) the sixty-first day after Bid opening. Bid security of other Bidders will be returned within ten (10) days of the Bid opening.

SECURITY: The Contractor shall furnish a Contract Performance Bond and a Payment Bond, each equal to one hundred percent (100%) of the Contract Price if the base bid price exceeds \$300,000. However, the City may impose this requirement on any contract in excess of \$30,000. This requirement, if exercised, will be specified in the Supplementary General Conditions. Bonds given shall meet the requirements of the law of the State of North Carolina including but not limited to G.S. 143-129 and G.S. 44A-26. The surety on each Bond shall be a surety company satisfactory to the City and duly authorized to do business in the State of North Carolina.

The Contractor shall also furnish other bid security or bonds that may be required by various Federal, State or Local authorities having jurisdiction as a condition of obtaining permits.

3. NOTICE AND SERVICE THEREOF

Any notice to Contractor from the City relative to any part of this Contract shall be in accordance with the City's Form of Contract.

4. INTENT OF DRAWINGS AND SPECIFICATIONS

The intent of the Drawings, Specifications/project manual and all other documents comprising the Contract Documents, is that the Contractor shall be held responsible to provide and pay for all labor, materials, tools, power, water, equipment, transportation, and other facilities necessary for the proper execution of the Work in accordance with the Contract Documents and all incidental Work necessary to complete the Project in an acceptable manner, ready for use, occupancy, or operation by the City.

The Drawings, Specifications/project manual, and all other documents comprising the Contract Documents, shall be supplementary to each other, and any material, Workmanship, and/or service which may be in one, but not called for in the others, shall be as binding as if indicated, called for, or implied by all. In case of discrepancy or disagreement in the contract documents, the order of precedence shall be: Form of Construction Contract, General Conditions, Supplemental General Conditions, Project Special Conditions, CSI Specification Sections, large-scale drawings, and small-scale drawings.

Any discrepancies found between the Drawings and Specifications and site conditions or any inconsistencies or ambiguities in the Drawings or Specifications shall be immediately reported to the Designer for the City, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after discovery of such discrepancies, inconsistencies, or ambiguities shall be done at the Contractor's risk.

Each section or type of Work is described separately in the Technical Specifications. For convenience of reference and to facilitate the letting of contracts and subcontracts, these Specifications are separated into titled sections. Such separation shall not, however, operate to make the City an arbiter to establish limits to the contracts between the Contractor and Subcontractors, nor shall such separation be interpreted as superseding normal construction trade jurisdictions. Should any item of material, equipment, Work, or combinations of such be required in one section, and not be described in that section and a similar item described in another section, that description shall apply regardless of the section under which it is described. In case of conflict between the Drawings and Specifications, the Specifications shall govern. Figure dimensions on Drawings shall govern over scale dimensions, and detailed drawings shall govern over general drawings.

Attention is directed to the fact that the detailed Specifications and separate sections may be written in short or abridged form. The Contractor shall, in regard to every section of the Specifications and Drawings of articles, materials, operations, or methods:

- a. Provide each item mentioned and indicated, of quality or subject to qualifications noted.
- b. Perform according to conditions stated, each operation prescribed.
- c. Provide therefore all necessary labor, equipment and incidentals.

Whenever in these Specifications or on the Drawings the words "directed," "required," "permitted," "ordered," or words of like import are used, it shall be understood that the direction, requirement, permission or order of the City is intended, and similar words, "approved," "acceptable," "satisfactory," or words of like import shall mean approved by, acceptable to, or satisfactory to the City.

Notwithstanding the appearance of such language in the various sections of the Specifications as, "The Paving Contractor," "The Grading Contractor," etc., the Contractor is responsible to the City for the entire Contract and the execution of all Work referred to in the Contract Documents.

The Designer for the City may (without changing the scope of the Work) furnish the Contractor additional instructions and detail drawings, as necessary to carry out the Work required by the Contract Documents. The additional drawings and instructions thus supplied will become a part of the Contract Documents. The Contractor shall carry out the Work in accordance with the additional detail drawings and instructions.

5. PRESENT DOCUMENTS GOVERN

The Contractor shall in no case claim a waiver of any specification requirements on the basis of previous approval of material or Workmanship on other jobs of like nature or on the basis of what might be considered "standard" for material or Workmanship in any particular location. The Contract Documents for this job shall govern the Work.

6. CONTRACTOR'S SHOP DRAWINGS

Absent of more detailed Shop Drawing and Submittal Requirement Provisions noted elsewhere in the Contract, Supplementary General Conditions, or Administrative Specification Requirements, the provisions outlined below shall be followed:

Within thirty (30) consecutive days after the issuance of the Notice to Proceed, the Contractor shall submit a schedule for the submission of all shop drawings, product data, samples, and similar submittals to the Designer. The schedule shall indicate the items, relevant specification sections, other related

submittal data, and the date when these items will be furnished to the Designer. Pay applications shall not be approved until the submittal schedule has been submitted.

The approved Drawings will be supplemented by such Shop Drawings as are needed to adequately control the Work. It is mutually agreed that all authorized alterations affecting the requirements and information given on the approved Drawings shall be in writing.

Shop Drawings to be furnished by the Contractor for any structure shall consist of such detailed drawings as may be required for the prosecution of the Work.

Shop Drawings must be approved by the Designer before the Work in question is performed. Drawings for false Work, centering, and form work may also be required, and in such cases shall be likewise subjected to approval unless approval be waived. It is expressly understood, however, that approval of the Contractor's Shop Drawings does not relieve the Contractor of any responsibility for accuracy of dimensions and details. It is mutually agreed that the Contractor shall be responsible for agreement and conformity of the Shop Drawings with the approved Drawings and Specifications.

It is the responsibility of the Contractor to review and approve all Shop Drawings for compliance with the contract documents, with signed evidence of review by the Contractor, before same are submitted to the Designer for approval. Shop Drawings that have not been reviewed and approved by the Contractor will not be approved.

Shop Drawings shall be submitted only by the Contractor who shall indicate by a signed stamp on the drawings that the submittal has been reviewed and approved the Shop Drawings and that the Work shown on them is in accordance with Contract requirements and has been checked for dimensions and relationship with Work of all other trades involved. Under no conditions shall Shop Drawings be accepted from anyone other than the Contractor.

The Contractor shall furnish the Designer at least six (6) hard copies of all Shop Drawings for approval. Shop drawings may also be electronically submitted for approval utilizing construction/project management software. Both the Designer and the Contractor shall be license holders of the software, house the software program on its server, and provide access to the City via a secured password and username. The Designer shall review required submittals promptly, noting desired corrections, if any, and retaining three (3) copies. The remaining copies will be returned to the Contractor by the Designer for the Contractor's use not later than twenty-one (21) days from the date of the receipt for multiple disciplines or fourteen (14) days from the date of receipt for single discipline. The Contractor shall furnish the required submittals with sufficient information and accuracy to obtain required approval of any item with no more than three submittals. Designer will record time beyond the initial three submittals for reviewing subsequent submittals of shop drawings, samples, or other items requiring approval and the Contractor shall reimburse the Owner for the charges for such time accrued by the Designer. The Contractor shall also be responsible for any delays to the project's schedule resulting from additional reviews.

The Contract Price shall include the cost of furnishing all Shop Drawings and the Contractor will be allowed no extra compensation for such drawings.

The approval of such Shop Drawings shall not relieve the Contractor from responsibility for deviations from Drawings or the Specifications unless the Contractor has in writing called attention to such deviations, and the Designer has approved the changes or deviations in writing at the time of submission, nor shall it relieve him from the responsibility for errors of any kind in Shop Drawings. When the Contractor does call such deviations to the attention of the Designer, any deviations involving extra cost shall be submitted in letter form by the Contractor. If the Contractor neglects to provide a letter, it will be assumed that no extra cost is involved for making the change.

7. INSTRUCTIONS, MINOR CHANGES, ETC.

All changes, alterations or instructions regarding any feature of the Work that differ from the Drawings and Specifications must be approved in writing in all cases, and no verbal orders will be regarded as a basis for claims for extra Work.

If the Contractor claims that any instruction by Drawings for a change or otherwise involves extra cost or an extension of time, the Contractor shall notify the Designer in writing within ten (10) days after the receipt of such instruction and, in any event, before proceeding to execute the Work. Thereafter, the procedure shall be the same as that described for changes in the Work. No such claim shall be valid unless made in accordance with the terms of this section.

No claims for extra cost will be considered based on an escalation of material prices throughout the period of the Contract.

No extra Work is to be performed or any change made that involves any extra cost or extension of time unless approved through an Authorization Request.

The Designer shall have authority, however to order minor changes in the Work not necessitating a cost event or change order, and not inconsistent with the intent of the Contract Documents. Such minor changes shall be affected by written order, bulletin drawing, or supplemental architectural instructions and shall be binding to the Owner and the Contractor.

8. EXAMINATION OF WORK BY CONTRACTOR

It is understood and agreed that the Contractor, has by careful examination, is satisfied as to the nature and location of the Work, the conformation of the ground, the character, quality, and quantity of the facilities needed preliminary to and during the prosecution of the Work, the general and local conditions, and all other matters which can in any way affect the Work or the cost thereof under this Contract. No verbal agreement or conversation with any officer, agent, or employee of the City, either before or after the execution of the Contract, shall affect or modify any of the terms or obligations herein contained.

The Contractor shall, in good Workmanlike manner, do and perform all Work and furnish all supplies and materials, machinery, equipment, facilities, and means, except as herein otherwise expressly specified, necessary, or proper to perform and complete all the Work required by this Contract, within the time herein specified, in accordance with the provisions of this Contract and said Specifications and in accordance with the Drawings of the Work covered by this Contract and any and all supplemental drawings of the Work covered by this Contract. The Contractor shall furnish, erect, maintain, and remove such construction, plants, and such temporary Works as may be required. The Contractor alone shall be responsible for the safety, efficiency, and adequacy of plants, appliances, and methods, and for any damage, which may result from their failure or their improper construction, maintenance, or operation. The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the Contract and Specifications, local ordinances, and State and Federal laws; and shall do, carry on, and complete the entire Work.

The Contractor is and remains fully responsible for its acts or omissions as well as those of any subcontractor or any employee of either. The Contractor agrees that no contractual relationship exists between the subcontractor and the Owner in regard to the Contractor and that the subcontractor acts on this Work as an agent or employee of the Contractor.

9. MATERIALS, SERVICES AND FACILITIES

The Contractor shall at all times employ sufficient labor and equipment for prosecuting the Work to full completion in the manner and time specified. Failure of the Contractor to provide adequate labor and equipment may result in default of the Contract. The labor and equipment to be used in the Work by the Contractor shall be sufficient to meet the requirements of the Work and shall be such as to produce a satisfactory quality of Work, in accordance with accepted industry practices within the time specified in the Contract.

If at any time during the construction and completion of the Work covered by these construction documents, the language, conduct, or attire of any Workman of the various crafts be adjudged a nuisance to the Owner or Designer, or if any Workman be considered detrimental to the Work, the Contractor shall order such parties removed immediately from the ground.

Materials and equipment shall be so stored and handled as to insure the preservation of their quality and fitness for the Work. Stored materials and equipment to be incorporated in the Work shall be located so as to facilitate prompt inspection. No product that has in any way become unfit for the intended purpose shall be incorporated into the Work.

Manufactured articles, materials and equipment shall be applied, installed, connected, erected, cleaned, and conditioned as directed by the manufacturer.

Materials, supplies, and equipment to be incorporated into the Work shall be new and unused unless otherwise specifically stated in the Contract Documents. The source of supply for all such products shall be submitted to the Designer, together with detailed descriptions thereof in the form of samples, Shop Drawings, tests, or other means necessary to adequately describe the items proposed. If, after trial, it is found that sources of supply, even though previously approved by the Designer, have not furnished products meeting the intent of the Contract Documents, the Contractor shall thereafter furnish products from other approved sources, and shall remove completed Work incorporating products which do not meet Contract requirements.

10. "OR EQUAL" CLAUSE

In accordance with G.S. 133-3, whenever a material or article required is specified or shown on the Drawings and/or Specifications by using the name of the proprietary product or of a particular manufacturer or vendor, the Designer shall denote that the quality standard of the article desired is the intent and the Contractor is not restricted to the specific brand, make, or manufacturer so named. The Designer shall specify three or more examples of items of equal or equivalent design. Any material or article that will perform adequately the duties imposed by the general design may be considered equal and satisfactory providing the material or article so proposed is of equal substance and function. The opinion of the Designer shall be final, and no substitute material or article shall be purchased or installed without such written approval.

Any proposed substitutions of materials, items, or equipment of equal or equivalent design shall be submitted to the Designer for approval or disapproval prior to the opening of bids. Proposed substitutions shall only be submitted by the prime contractors. No requests from subcontractors, manufacturers or suppliers will be accepted.

11. TESTING OF MATERIALS

Unless otherwise specifically provided for, testing of materials and finished articles to be incorporated in the Work at the site shall be made by bureaus, laboratories, or agencies approved by the Designer and Owner. All laboratory tests shall be paid by the Owner unless provided otherwise in the contract documents. The Contractor shall furnish evidence satisfactory to the Designer that the material and finished articles have passed the required tests prior to the incorporation of such materials and finished articles in the Work.

The Contractor shall pay for the laboratory tests to establish design mixes for concrete, asphalt, mortar and other materials proposed for use on the project, and for additional tests to prove compliance with contract documents where materials have tested deficient except where the testing laboratory did not follow the appropriate testing procedures as defined in the Specifications.

12. INSPECTION OF WORK BY OTHER PARTIES

The Contractor shall, at all times, permit and facilitate inspection of the Work by authorized representatives of the City and authorities having jurisdiction in connection with the Work of this Contract. The presence or observations of the Designer or other City representatives at the site of the Work shall not

be construed to, in any manner, relieve the Contractor of the responsibility for strict compliance with the provisions of the Contract Documents.

All Work shall be inspected by the Designer or the Owner's or its Consultants prior to being covered by the Contractor. The Contractor shall give a minimum of two weeks' notice unless otherwise agreed to by all parties. Not less than 48 hours prior to inspection or testing, the Contractor shall coordinate said events with the Designer, Owner, and/or respective parties. If the inspection fails after the first re-inspection, all costs associated with additional re-inspections, including travel, per diem, testing, etc. for the Designer or the Designer's authorized representative and the Owner's Consultants, shall be borne by the Contractor.

If the Specifications, City's instructions, laws, ordinances, or an authority having jurisdiction require any Work to be specially tested or approved, the Contractor shall give the Designer timely notice of its readiness for observation or inspection. If the inspection is by another authority, then the Designer shall be advised of the date fixed for such inspection. Required certificates of inspection shall be secured by the Contractor. Contractor having secured all certificates of inspection will deliver same to the Designer upon completion. If any Work should be covered up without approval or consent of the Designer, Project Manager, Special Inspector, it shall, if required by the Designer, be uncovered for examination at the Contractor's expense.

Should any disagreement or difference arise as to the estimate, quantities or classifications or as to the meaning of the Drawings or Specifications, or any point concerning the character, acceptability, and nature of the several kinds of Work, any materials and construction thereof, the decisions of the Designer shall be final and conclusive and binding upon all parties to the Contract.

13. AUTHORITY OF THE DESIGNER/ENGINEER

The Contractor shall perform all of the Work herein specified under the general direction, and to the entire satisfaction, approval, and acceptance of the Designer. The Designer shall decide all questions relating to measurements of quantities; the character of the Work performed and as to whether the rate of progress is such that the Work will be completed within the time limit of the Contract. All questions as to the meaning of these Specifications will be decided by the Designer.

The approval of the Designer of any materials, plants, equipment, Drawings, or of any other items executed, or proposed by the Contractor shall be construed only to constitute an approval of general design. Such approval shall not relieve the Contractor from the performance of the Work in accordance with the Contract Documents, or from any duty, obligations, performance guarantee, or other liability imposed upon him.

Where drawings or specifications are sealed by the Engineer, in lieu of Designer, these same provisions shall apply to the Engineer.

14. PROHIBITED INTERESTS

No official of the City who is authorized in such capacity and on behalf of the City to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction, or material supply contract, or any subcontract in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part hereof. No officer, employee, architect, attorney, engineer, or inspector of or for the City who is authorized in such capacity and on behalf of the City to exercise any legislative, executive, supervisory, or other similar functions in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the Project.

15. REJECTIONS OF WORK AND MATERIALS, AND OWNER'S RIGHT TO DO WORK

All materials and equipment furnished, and all Work done that is not in accordance with the Drawings or Specifications or that is defective will be rejected. All rejected materials, equipment, or Work

shall be removed immediately. If rejected materials, equipment, or Work is not removed within forty-eight hours from the date of letter of notification, the Designer shall have the right and authority to stop the Contractor's Work immediately, and/or shall have the right to arrange for the removal of said rejected materials, equipment, or Work at the cost and expense of the Contractor. All rejected materials, equipment, or Work shall be replaced with other material, equipment, or Work that conforms with the Drawings and Specifications at no additional cost to the City.

Inspection of the Work shall not relieve the Contractor of any obligations to fulfill the Contract and defective Work shall be made good regardless of whether such Work, material, or equipment has been previously inspected by the Designer and accepted or estimated for payment. Neither the final certificate, final payment, occupancy of the premises by the Owner, nor any provision of the contract, nor any other act or instrument of the Owner, nor the Designer shall relieve the Contractor from responsibility for negligence or faulty material or Workmanship or failure to comply with the drawings and Specifications.

If during the progress of the Work or during the period of guarantee, the Contractor fails to prosecute the Work properly or to perform any provision of the contract, the Owner, after seven days' written notice sent in person or via email with delivery confirmation or certified mail, return receipt requested, to the Contractor from the Designer, may perform or have performed that portion of Work. The cost of the Work may be deducted from any amount due or to become due to the Contractor, including retainage, such action and cost of same having been first approved by the Designer. Should the cost of such action of the Owner exceed the amount due or to become due to the Contractor, then the Contractor or the Contractor's the Surety, or both, shall be liable for and shall pay to the Owner the amount of said excess.

16. ROYALTIES AND PATENTS

The Contractor shall hold and save the City and its officers, agents, servants, and employees, harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the City, unless otherwise specifically stipulated in the Contract Documents.

17. CONTRACTOR'S SUPERINTENDENCE AND PERSONNEL

The Contractor will supervise and direct the Work. The Contractor will be solely responsible for the means, methods, techniques, sequences, and procedures of construction. An experienced Superintendent, and the necessary assistants competent to supervise the Work involved, shall be assigned to the Project by the Contractor and shall be present at the site when Work is in progress. The name of the Superintendent shall be submitted with qualifications of same prior to start of the Work and shall be approved by the Designer prior to start of the Work. The Superintendent so named by the Contractor shall be employed by the Contractor and shall have served in a supervisory capacity on at least one Project of like description and size performed by the Contractor during the previous twelve months. Under no circumstances shall an employee of any Subcontractor serve as Project Superintendent. The Superintendent shall represent the Contractor, and all directions given to the Superintendent shall be as binding as if given to the Contractor.

Only persons skilled in the type of Work that they are to perform shall be employed. The Contractor shall maintain discipline and good order among its employees and shall not employ on the Work any unfit person or persons or anyone unskilled in the Work assigned him. The Contractor shall insure that all employees maintain proper respect and courtesy for the any persons/individuals on the project site or in adjacent off-site areas.

18. LINES, GRADES AND MEASUREMENTS

Such stakes and markings as the Designer may set for either its or the Contractor's guidance shall be preserved by the Contractor. Failure to protect such stakes or markings, or gross negligence on the Contractor's part resulting in loss of same, may result in the Contractor being charged for their replacement.

The Contractor must exercise proper care and caution to verify the grades and figures before proceeding with the Work and shall be responsible for any damage or defective Work caused by the Contractor's failure of such care and caution. The Contractor shall promptly notify the Designer of any errors or discrepancies discovered in order that the proper corrections may be made.

19. LAYOUT OF WORK

The Contractor shall lay out its work from established base lines and bench marks indicated on the drawings, and shall perform all construction layout, computations and staking from the baseline information and control points shown on the drawings and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Designer/Owner.

Prior to the start of any layout work, the Contractor shall provide the names and license numbers of the professional land surveyors and/or engineers, licensed in the State of North Carolina, who will be in charge of their survey for the project.

During initial site layout and before existing conditions are disturbed, the Contractor shall verify the basic survey data provided on the contract drawings. Verification shall be initiated from the point(s) shown on the contract drawings and shall include, as a minimum, benchmark elevations, horizontal control points, and sufficient spot checks of critical elevations to ensure that the survey data adequately reflects existing conditions.

The Contractor will provide the Designer and Owner with a copy of the initial, intermediate (as necessary to adequately define an area of concern) and final survey information in an electronic PDF file and CAD or .DWG drawing file, and a point data file in electronic CAD or .DWG format which contains the survey control found (or established) in the field by the surveyor. The CAD or .DWG drawing file will be based on the coordinate system indicated on the contract drawings and will also show street r/w and property corners, easements, and the proposed improvements.

20. PERMITS, LICENSES, AND IMPACT FEES

Permits and licenses of a temporary nature necessary for the prosecution of the Work shall be secured by the Contractor. Costs for permits, licenses, and impact fees may be included in the total contract amount as an allowance. Refer to the bid documents or Supplemental General Conditions.

21. LAWS AND REGULATIONS

The Contractor's attention is directed to the fact that all applicable Federal, State, and City laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout, and they will be deemed to be included in the Contract Documents the same as though herein written out in full. The Contractor is responsible for being fully informed of all laws, ordinances, and regulations of the Federal, State, and City in any manner affecting those engaged or employed in the Work or the materials used in the Work or in any way affecting the conduct of the Work and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over same. If any discrepancy or inconsistency should be discovered in this Contract, or in the Drawings or Specifications herein referred to, in relation to any such law, regulation, ordinance, order, or decree, the Contractor shall herewith report the same, in writing, to the Designer. The Contractor shall always observe and comply with all such laws, ordinances, and regulations, and shall protect and indemnify the City and its agents against any such law, ordinance, regulation, order, or decree, whether by the Contractor including any employees.

22. SUBCONTRACTING

The Contractor understands and agrees that it shall be a breach of this Contract to subcontract any portion of the Work on this Project unless the Work and the Contractor proposed to perform it have been

declared in the Proposal to the Contract. **Within seven (7) days after award of the contract, the Contractor shall submit to the Designer and Owner a list giving the names and addresses of subcontractors, and equipment and material suppliers proposed to be used together with the scope of their respective parts of the Work.** Should any subcontractor be disapproved by the Designer or Owner, the Designer or Owner shall communicate its decision to the Contractor. The Contractor shall present substitutions to the Designer and Owner for approval. If the subcontractor is listed on the MWBE affidavits, another MWBE subcontractor with similar certification/classification shall be substituted.

THE CONTRACTOR FURTHER UNDERSTANDS AND AGREES THAT ANY WORK ON THIS PROJECT WHICH THE CONTRACTOR SECURES IN VIOLATION OF THIS PROVISION SHALL BE DEEMED A GRATUITY FROM THE CONTRACTOR FOR WHICH THE CITY OF RALEIGH SHALL NOT BE OBLIGATED TO PAY. ALSO, THAT ANY WORK DONE BY THE SUBCONTRACTOR AND NOT MEETING THE SPECIFICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE AT NO COST TO THE CITY.

Nothing contained in this Contract shall create any contractual relation between any Subcontractor and the City.

23. SUBCONTRACTORS

The Designer may furnish to any subcontractor, upon written request, evidence regarding amounts of money requested to be paid to the Contractor regarding the portion of the subcontractor's work; provided however, that the Contractor has sufficiently broken down the request to allow such determination.

The Owner reserves the right to limit the amount of work, or the percentage of work, to be subcontracted as hereinafter specified.

24. ASSIGNMENTS

The Contractor shall not assign the whole or any part of this Contract or any monies due or to become due hereunder without written consent of the City.

25. INSURANCE REQUIREMENTS

Review the City of Raleigh Form of Contract and Supplemental Conditions for the specific insurance requirements.

26. LAND AND RIGHTS-OF-WAY

Prior to entering on any land or right-of-way, the Contractor shall ascertain the requirements of applicable permits or easements secured by the City or required of the Contractor and shall conduct the Work in accordance with requirements thereof including the giving of notice.

The Contractor shall provide at its own expense and without liability to the City any additional land and access thereto that the Contractor may desire for temporary construction facilities, or for storage of materials.

27. PROTECTION OF WORK, PROPERTY AND PERSONS

The Contractor will be required to protect all Work and materials against damage or injury from the weather. If, in the opinion of the Designer, any Work or materials shall have been damaged or injured by reason of failure to protect such, all such materials or Work shall be removed and replaced at the expense of the Contractor.

The Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The Contractor will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the Work

and other persons who may be affected thereby, all the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, lakes, drainage ways, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction. Contractor shall provide continuously sufficient illumination at all barricades and at protective barriers around excavations so that the public is adequately warned of such hazards. The Contractor shall, where necessary, provide and maintain access to and from all adjacent properties as directed by the plans and Specifications, or the Designer, or the Owner's Representative, for street rights of way, along the line of the Contractor's Work. The Contractor shall abide by the Manual on Uniform Traffic Control Devices (MUTCD) for any street closures or traffic control.

The Contractor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. The Contractor will erect and maintain, as required by the conditions and progress of the Work, all necessary warning safeguards for devices and safety and protection of the Work, the public, and adjoining property. The Contractor shall immediately notify Owners of adjacent utilities when prosecution of the Work may affect them. The Contractor will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

The Contractor shall, prior to commencing other on-site Work, accurately locate above and below ground utilities and structures, which may be affected by the Work, using whatever means may be appropriate. The Contractor shall mark the location of existing utilities and structures, not otherwise readily visible, with flagging, stakes, barricades, or other suitable means, and shall preserve and protect all utilities and placement during construction. The Contract shall notify the Designer promptly on discovery of any conflict between the Contract Documents and any existing facility.

In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, or unanticipated conditions where delay would substantially impact the time or cost of Work, the Contractor, upon notification to the Designer, shall act to prevent threatened damage, injury, or loss. Any claim for compensation or extension of time by the Contractor due to such extra Work shall be submitted to the Designer within ten (10) days of the date of performing such Work or deviations in the manner prescribed for a cost event or change order. The Designer will evaluate and determine if the claims asserted by the Contractor warrant a cost event or change order and will make a recommendation to the Owner.

All existing utilities, both public and private, including sewer, gas, water, electrical, and telephone services, etc., shall be protected and their operation shall be maintained through the course of the Work. Any temporary shutdown of an existing service shall be arranged between the Contractor and the utility responsible and hold the City harmless from the result of any damage that may occur as a result of the Contractor's activities.

See the City's Form of Contract and the Supplementary Conditions for additional safety requirements.

28. PRIOR USE BY CITY

Prior to completion of the Work, the City may take over operation and/or use of the uncompleted Project or portions thereof. The Contractor must agree to the prior use, and it must not prevent the Contractor from completing the Work. Such prior use of facilities by the City shall not be deemed as acceptance of any Work or relieve the Contractor from any of the requirements of the Contract Documents.

Where the City has beneficial occupancy of a usable facility prior to the expiration of the specified Contract Time, but where contract Work items remain outstanding, the City, at its option, may, in lieu of all or a proportion of liquidated damages owed by the Contractor, charge the Contractor for actual cost of administering the Contract for a period subsequent to expiration of the Contract completion date (not to exceed the total amount which could be assessed under liquidated damages).

29. CLEANING UP AND SITE ACCESS

The Contractor shall at all times keep the premises free from accumulation of waste materials or rubbish caused by Contractor's employees or Work. Upon completion of the Work, the Contractor shall remove all equipment, tools, materials, and other articles from the property of the City. Delivery of construction materials and equipment shall be only from locations approved by the City.

30. DISPOSAL OF WASTE MATERIALS FROM ANY CONSTRUCTION

Disposal of all waste material from construction sites shall be made in strict accordance with all State laws and City ordinances pertaining to disposal of construction or hazardous waste. It shall be the responsibility of the Contractor to secure the necessary permits and provide all information required to secure said permits. The Contractor shall designate the disposal site prior to beginning construction and in the event waste material is to be disposed of on private property, a letter from the property Owner shall be furnished to the Owner or its representative granting the Contractor or the Contractor's agent(s) such permission and listing the requirements made by the property Owner on the Contractor, if any.

31. CHANGES IN THE WORK

The City may at any time, as the need arises, order changes within the scope of the Work without invalidating the agreement. If such changes increase or decrease the amount due under the Contract Documents or in the time required for performance of the Work, an adjustment may be authorized by a cost event or change order.

The Contractor must assert any request for an adjustment to the contract price, performance schedule, or both, in writing no later than 10 days from the Contractor's first knowledge of the change, or its right to assert such request for equitable adjustment shall be considered waived. Under no circumstance shall any pending request for adjustment or dispute excuse the Contractor from proceeding with its performance, as changed. The Owner, in its sole discretion, may receive and act upon any request for equitable adjustment at any time before final payment.

The Designer, also, may at any time, make changes in the details of the Work as may also be approved by the Owner. The Contractor shall proceed with the performance of any changes in the Work so ordered by the Designer unless the Contractor believes that such change entitles him to a change in contract price, time, or both, in which event the Contractor shall give the Designer written notice thereof within five (5) days after the receipt of the ordered change, and the Contractor shall not execute such changes pending the receipt of authorization from the Owner or the Designer.

32. MODIFICATION AND PRICE PROPOSALS (Form is attached at the end of the General Conditions. COR will provide an electronic file to the Contractor following NTP.)

The City may issue modification and price proposal requests for changes during the contract. The Contractor shall submit itemized price proposals including those for all subcontractors and sub-tiers for any such requests. The format used by the City for an adjustment in accordance with this term shall be a Request for Proposal (RFP). The Contractor's proposal shall be submitted within 10 days, or as otherwise directed by the Department, of the Contractor's first knowledge of the proposed change or receipt of the RFP. The City or Designer may also issue a Notice to Proceed associated with the request for proposal should it be determined to be in the City's best interest.

The proposal shall include a detailed breakdown of all labor, equipment, materials, supplies, overhead and profit costs for both the contractor and all subcontractors at any tier to allow a review of the proposal. Material, labor, equipment and other direct cost shall be summarized and totaled as construction direct costs in the proposal. Overheads, profit, and bond shall be added as appropriate line items shown as indirect or soft cost in the proposal. Cost estimates or pricing detail backup shall be completely itemized to include direct labor man-hours, individual craft, and hourly wage rate. Include verifiable labor burden (including craft fringes, FUI, SUI, and FICA) as a separate line item.

All subcontractor proposals shall include this same level of breakdown and detail and shall be so noted in the Contractor's proposal. The contractor shall provide copies of any quotations that have been

received in regard to the proposal and shall ensure that adequate competition has been obtained such that the proposal is fair and reasonable. Any credit for deleted work shall also be reflected on the proposal.

Such proposal shall also include a detailed justification for any time extension request that is being requested as part of the equitable adjustment. Any time extension request that arise from the proposal shall be clearly noted, shall identify the specific activity or activities involved, and shall depict the changes necessary in the project schedule in order to accomplish the change. The contractor is advised that any request in contract period must demonstrate that there has been an increase in the critical path for completion of the project that is directly attributed to the change. The contractor shall provide a revised project schedule incorporating any time extension resulting as part of the equitable adjustment.

Lump sum cost estimates or price proposals shall be rejected and returned to the Contractor for itemization as described above. Failure of the Contractor to submit properly itemized cost estimates or price proposals shall not constitute an excusable delay. The equitable adjustment shall not include increased costs or time extension for delay resulting from the Contractor's failure to provide notice or to diligently continue performance. No proposal from the Contractor for an equitable adjustment shall be allowed if not asserted within time frames in this clause.

Limits of Claim:	
Insurance:	30%
Profit and Overhead charge for additional Contractor's work:	15%
Profit and Overhead charge for deductive Contractor's work:	10%
Profit and Overhead charge for additional Sub-contractor's work:	5%
Profit and Overhead charge for deductive Sub-contractor's work:	0%

The contractor may submit for approval recent audited financial statements performed in accordance with generally accepted accounting procedures to help establish an overhead rate for this project. Absent of this information, the rates noted above shall apply.

Where the extra Work involved is covered by unit prices quoted in the proposal, or subsequently agreed to by the Contractor, Designer, and the City, the value of the change shall be computed by application of unit prices based on quantities, estimate or actual as agreed of the items involved, see Section 48.

33. TIME FOR COMPLETION, LIQUIDATED DAMAGES AND TIME EXTENSIONS

The time of completion is expressed as the number of calendar days from the Notice to Proceed. It is hereby understood and mutually agreed, by and between the Contractor and the City, that the date of beginning, rate of progress and the time for completion of the Work are essential conditions of this Contract; and it is further mutually understood and agreed that the Work embraced in this Contract shall be commenced on a date to be specified in the Notice to Proceed.

The Contractor agrees that said Work shall be prosecuted regularly, diligently and uninterrupted at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the City, that the time for the completion of the Work described herein is a reasonable time for the completion of the same, taking into consideration the average climate range prevailing in this locality.

The Contractor shall commence work as outlined in the Notice to Proceed and shall fully complete all work hereunder within the time of completion stated. For each day in excess of the contract completion number of days, the Contractor(s) shall pay the Owner the sum stated as liquidated damages reasonably estimated in advance to cover the losses to be incurred by the Owner by reason of failure of said Contractor(s) to complete the work within the time specified, such time being in the essence of this contract and a material consideration thereof.

The Contractor acknowledges that delays will damage the Owner, but also acknowledges that proof of such damages would be difficult and costly for both parties to determine, and that the injury to the Owner which could result from a failure of the Contractor to complete the Project on schedule is uncertain and

cannot be computed with exact precision. In order to liquidate in advance the delay damages that the Owner will be entitled to recover from the Contractor in the event of unexcused delays in the FINAL completion of the Project, the Contractor agrees that it will pay, and that the Owner may retain from the funds otherwise to be paid to the Contractor, the following Liquidated Damages and additional Owner Engineering Expenses and Other Fees, which sums are agreed upon as a reasonable and proper measure of damages which the Owner will sustain by failure of the Contractor to complete Work within the time stipulated, and as Owner's sole and exclusive remedy for any such delays. See Supplementary Conditions for Owner's liquidated damages.

It is further agreed that time is of the essence for this Contract and of the Specifications wherein a definite portion and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract an additional time is allowed for the completion of any Work, the new time limit fixed by such extension shall be of the essence for this Contract.

Provided, that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the Work is due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor or that of their subcontractor at any tier, including but not restricted to unavoidable casualties; by acts of God or of the public enemy; by acts of the Government in either its sovereign or contractual capacity; by acts of another Contractor in the performance of a contract with the City; by fires; by floods; by epidemics; by quarantine restrictions; by strikes; by freight embargoes; by unusually severe weather exceeding the average climatic conditions in that area of the Work or by any other causes which the Designer and Owner determine may just the delay, then the contract time may be extended by change order for the time as determined to be reasonable.

Time extensions under this provision do not entitle the Contractor to compensable damages for delays. Any Contractor claim for compensable damages is limited to delays caused solely by the Owner or its agents. Contractor caused delays shall be accounted for before Owner or Designer caused delays in the case of concurrent delays.

Provided further, that the Contractor shall within ten (10) days from the beginning of such delay, notify the City, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of its decision in the matter.

34. WEATHER DELAY TIME EXTENSIONS

As noted in the Section 34, Time For Completion, Liquidated Damages And Time Extensions, if the contract is delayed at any time in the progress of Work by abnormal weather conditions not reasonably anticipated for the locality where the Work is performed, then the contract time may be extended by change order only for the time which the Designer and Owner may determine is reasonable. The methods to be used for determining the weather delay time extensions are as outlined in this section.

Time extensions will not be granted for rain, wind, snow, or other natural phenomena of normal intensity for the locality where Work is performed. The time for completion includes an allowance for bad weather days based on climatological data and is adjusted to reflect the number of working days per month, which would be affected.

- a. For the purposes of determining the extent of a delay attributable to unusual weather phenomena, please see the table below which notes the maximum number of days by month that can be considered "bad weather" days. For the purposes of this contract, bad weather days to be anticipated are defined as follows:
- b. Days on which precipitation exceeds 0.10 inch of rain equivalent as measured at the beginning of the workday by the precipitation gauge maintained at the Project site.
- c. Days on which the temperature fails to exceed 40 degrees F average (a) measures less than 40 degrees Fahrenheit or below product specifications constraints related to temperature (examples include, but are not limited to, placing concrete, roofing applications, fireproofing application, waterproofing application, exterior envelope installation, and masonry activities) or (b) in excess of 100 degrees Fahrenheit. Note that a day, which qualifies on criteria for both precipitation and temperature, shall be counted as one day.

- d. Days on which prior to building dry-in conditions, Project site conditions such as mud, pooling of water, ice, or standing snow prevent the performance of construction activities such as, but not limited to, mass grading, building pad grading, excavations, and backfill operations.
- e. Days on which wind speeds, as measured by a gauge located at the Project site, exceed those wind speeds that are permissible to use equipment or to perform certain construction tasks safely. Examples may include not being able to safely use crane(s) or other aerial equipment for erection of the building structure.

Bad weather working days to be included in the contractor's schedule are:

Month	Days	Month	Days	Month	Days
January	17	May	7	September	5
February	15	June	4	October	3
March	5	July	5	November	9
April	4	August	5	December	10

The Contractor shall note actual job site weather conditions on the daily report of construction, along with work performed and any effect of weather conditions on the scheduled activities. Tabulations of weather conditions on the job site, and any effects of weather on the critical path activities, shall be totaled on a monthly basis as work progresses. Periods where weather conditions are more favorable than anticipated shall also be accounted in the weather analysis. If the total accumulated number of working days lost to bad weather exceeds the total number tabulated above, the time for completion will be extended by the difference. Time of completion will not be adjusted for actual bad weather days which total less than the number included in the tabulation.

No weather delays shall be considered for building or structure construction after the building or structure has been dried in, unless such other Work claimed to be delayed is on the critical path of the baseline schedule or approved updated schedule. This determination will be made in consultation between the Designer and Owner.

35. PAYMENTS TO CONTRACTOR

Cost Breakdown – The Contractor shall be prepared to submit a cost breakdown/schedule of values immediately after the opening of Bids. Cost breakdown shall be based on values of parts of the Work as divided according to sections of the Specifications and shall be further subdivided into labor and materials. The Contractor shall use forms similar to the AIA G702 & G703 Forms for cost breakdown and payment requests. Other pay request forms as provided or approved by the Owner may also be used.

Applications for payment shall be submitted to the Designer for review and certification prior to submittal to the Owner for payment. Applications that have not been certified by the Designer shall be rejected by the Owner and returned to the Contractor. Designers will forward certified pay applications to the Project Manager for prompt payment. The pay application shall include the following information:

- a. Total of the contract including change orders or approved authorization requests.
- b. Value of Work completed to date.
- c. Less 5% Retainage (see additional clarification in this section).
- d. Less previous payments.
- e. Current amount due.
- f. The Contractor shall provide a sales tax statement certifying the amount of sales taxes paid for the Work provided under the contract. Manufacturers are not exempt from paying North Carolina sales taxes for providing an item directly to the City of Raleigh. If you have any questions about the sales tax requirements for the state of North Carolina, please contact the North Carolina Department of Revenue at (919) 707-0880 or (877) 252-3052.
- g. Updated progress schedule reflecting scheduled and actual completion percentages for the overall project as well as activity progress.

As specified in G.S. 143-134.1(b), within seven (7) days of receipt of payment by the Contractor of each periodic or final payment, the Contractor shall pay its subcontractor(s) based on Work completed or service(s) provided. If any periodic or final payment to the subcontractor is delayed by more than seven (7) days after receipt of periodic or final payment by the Contractor, the Contractor shall pay the subcontractor interest, beginning on the eighth day, as a rate of one percent (1%) per month or fraction thereof on the unpaid balance as is due.

In accordance with G.S. 143-134.1(b1), no retainage on periodic or final payments made by the Owner or Contractor shall be allowed on public construction contracts in which the total project costs are less than one hundred thousand dollars (\$100,000). When the project is fifty percent (50%) complete, the Owner, with written consent from the Surety, shall not retain any further retainage from periodic payments due the Contractor, if the Contractor continues to perform satisfactorily and any nonconforming Work identified in writing prior to that time by the designer or Owner has been corrected and accepted by the designer or Owner. If the Owner determines that the Contractor's performance is unsatisfactory, the Owner may reinstate retainage.

Each pay application shall reference the Owner's assigned purchase order number.

Materials and Work Covered by Partial Payments - All materials and Work covered by progress payments shall, upon payment thereof, become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and Work upon which payments have been made, or the restoration of any damaged Work.

37. STORED MATERIALS

In the preparation of partial estimates, the Owner **may** authorize payment for material delivered to the site and preparatory work done to be taken into consideration subject to the following requirements:

- a. The materials have been submitted and approved for use on the project.
- b. The materials are satisfactorily stored to protect the materials for their intended use.
- c. The Contractor has provided a detailed paid bill of sale or invoice that notes the type and quantity of material included on the invoice, complete with a schedule of unit price values, such that the material inventory can be tracked during installation.

The Contractor shall provide inventory control schedule with each partial payment request that reflects that type of stored material, quantity, unit prices, a schedule noting opening, used that period and ending inventory of materials and total summary of stored material amount being requested on the partial estimate. A copy of a suitable form that may be used by the Contractor is included as an attachment.

The Contractor acknowledges that it has responsibility to insure and protect such stored materials under the terms of its bond and insurance coverage with the Owner, and to maintain such stored materials in proper condition for installation and to fulfill the contract requirements when installed. Payment for the materials as described shall constitute a transfer of title to the Owner but such transfer does not relieve the Contractor of the responsibility to inspect, safeguard and protect the stored materials until they are incorporated into the permanent work. Payment for the materials does not constitute the start of any warranty, either express or implied, as such action shall not begin until the installation is complete and the work accepted.

The Contractor shall be responsible for the safety and security of subject materials and assume all risk for loss of materials.

Materials delivered to the Contractor at locations other than the project site may also be taken into consideration if, in addition to the above, the Contractor provide evidence the materials are being stored in a secured and protected facility and environment. The location for such storage shall be approved by the Designer/Owner.

38. PAYMENTS WITHHELD

The Designer may recommend to the Owner to withhold payment for any of the following reasons:

- a. Faulty Work not corrected.
- b. The unpaid balance on the contract is insufficient to complete the Work in the judgment of the Designer.
- c. To provide for sufficient contract balance to cover liquidated damages that will be assessed.
- d. Evidence that subcontractors have not been paid.

39. SCHEDULES, REPORTS AND RECORDS

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

The Contractor shall submit to the Designer within thirty (30) days after the issuance of the Notice to Proceed schedules showing the proposed order of work, including start dates at various parts of the Work, estimated date of completion of each part; and, as applicable, the dates at which special detail drawings will be required, and respective dates for submission of Shop Drawings, the beginning of manufacture, the testing and the installation of materials, supplies and equipment. The basic project schedule shall be presented at the preconstruction meeting and no partial payments shall be made until it has been submitted to the Designer and City. The Designer shall specify acceptable scheduling or project management software programs, type of schedule methodology, either bar chart or critical path, to be utilized by the Contractor in reflecting the construction project's progress. The Contractor shall provide the schedule to the Designer and Owner electronically and in hard copy. See supplemental conditions if there are preferred scheduling software required by the Designer and/or Owner and any specific scheduling requirements.

Where a bar chart schedule is required, it shall be time-scaled in weekly increments, shall indicate the estimated starting and completion dates for each major element of Work by trade and by area, level, or zone, and shall schedule dates for all salient features, including, but not limited to the placing of orders for materials, submission of shop drawings, and other submittals for approval, approval of shop drawings by Designers, the manufacture and delivery of material, the testing and the installation of materials, supplies and equipment and all Work activities to be performed by the Contractor. The Contractor shall allow sufficient time in the schedule for all commissioning, required inspections and completion of the final punch list(s). Each Work activity will be assigned a time estimate by the Contractor. One day shall be the smallest time unit used.

Critical Path Method (CPM) schedule is required for all formal projects. The CPM schedule shall be in time-scaled precedence format. It shall be drawn or plotted with activities grouped or zoned by Work area of subcontract as opposed to random format. The CPM schedule shall be time-scaled on a weekly basis and shall be drawn or plotted at a level of detail or logic which will schedule all salient features of the Work to be performed by the Contractor. The Contractor shall allow sufficient time in the schedule for all commissioning, required inspections, and completion of final punch list(s). Each Work activity will be assigned a time estimate by the Contractor. One day shall be the smallest time unit used.

The CPM will identify and describe each activity, state the duration of each activity, the calendar dates for the early and late start and the early and late finish of each activity, and clearly highlight all activities on the critical path. "Total float" and "free float" shall be indicated for all activities. Float time shall not be considered for the exclusive use or benefit of either the Owner or the Contractor but must be allocated in the best interest of completing the Work within the contract time. Extensions to the Contract time, when granted, will be granted only when equitable time adjustment exceeds the total float in the activity or path of activities affected by the change.

A cumulative progress-versus-time curve for the activities shall be shown. The vertical scale shall represent cumulative project progress and the horizontal scale shall represent time. Scheduled cumulative progress shall be calculated and plotted on the scale. Actual progress shall be calculated with each

payment and plotted as work progresses. This project earnings curve indicating scheduled earnings vs. actual earnings shall generally be plotted and reflected as an earnings "S" curve. The Contractor shall submit this as a schedule of payments that they anticipate they will earn during the course of the Work.

The Contractor shall submit updated schedules at each monthly meeting or at the request of the Designer or Owner. If any activities are behind schedule, the Contractor must indicate in writing what measures will be taken to bring each activity back on schedule and to ensure that the contract completion date is not exceeded. A plan of action and recovery schedule shall be developed and submitted to the Designer when: (1) the Contractor's report indicates delays, that are in the opinion of the Designer or Owner, of sufficient magnitude that the Contractor's ability to complete the Work by the scheduled completion date is brought into question; or (2) the updated construction schedule is thirty (30) days behind the planned or baseline schedule and no legitimate time extensions are in process or have been approved; or (3) the Contractor desires to make changes in the logic (sequencing of Work) or the planned duration of future activities of the CPM schedule which, in the opinion of the Designer or Owner, are of a major nature. The plan of action, when requested by the Designer or Owner, shall be submitted to the Designer and Owner, within five calendar (5) days of the request. The recovery schedule, when required, shall be submitted to the Designer and Owner, within five (5) calendar days of the request.

Failure to provide updated construction schedules, plans of action, or recovery schedules, as requested or required, shall be considered grounds for rejection of pay applications.

40. CITY'S RIGHT TO TERMINATE

See the City of Raleigh Form of Contract concerning the City's right to terminate.

41. FINAL ACCEPTANCE OF WORK AND FINAL PAYMENT

Before issuing final payment, the Contractor shall promptly remove from the premises all materials condemned by the Owner's Representative or Consultant as failing to conform with the Contract, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute his own work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

Final Acceptance shall occur when the Designer and Owner mutually agree to accept the project from the contractor. Final acceptance of the project shall not be considered before the final inspection is conducted. Final acceptance of the project may occur prior to correction of punch list items.

Final Inspection: Upon notice from the Contractor that the Work is completed, the Designer and Owner shall make a final inspection of the Work and shall notify the Contractor of all instances where the Contractor's Work fails to comply with the Drawings and Specifications, as well as any defects discovered. Deficiencies shall be recorded on a "punch list" and the Contractor shall immediately make such alterations as are necessary to make the Work comply with the Drawings and Specifications.

Final Payment: When the Work under this Contract is completed, a final payment request shall be submitted representing the original Contract Price, cost events, and change orders to the Contract. The final payment shall not be due until the Contractor shall have completed all Work necessary and reasonably incidental to the Contract, including final clean up.

The final payment of monies or retained amount due the Contractor for the contract shall not become due until the Contractor has furnished to the Owner, through the Designer, an affidavit signed, sworn and notarized to the effect that all payments for materials, services or subcontracted work in connection with the contract have been satisfied, and that no claims or liens exist against the Contractor in connection with this contract. To the event that the Contractor cannot obtain similar affidavits from sub-contractors to protect the Contractor and the Owner from possible liens or claims against the sub-contractor, the Contractor shall state in the affidavit that no claims or liens exist against any sub-contractor to the best of (the Contractor's) knowledge, and, if any appear afterward, the Contractor shall hold and save the Owner harmless. Retainage for the final as-built drawings in the amount of one (1%) of the construction value, or

\$30,000, whichever is the greater, shall be withheld until the final as-built drawing submittal has been approved.

The final payment may not be processed until the Designer has certified that the project has been completed in accordance with the contract Specifications and drawings.

Final acceptance of the Work and the making of final payment shall not constitute a waiver of any claims by the City. Payments otherwise due the Contractor, including Retainage, may be withheld by the City because of defective Work not remedied and unadjusted damage to others by the Contractor or Subcontractors, vendors or laborers.

All requests for final payment must be submitted within 60 days after the Work has been completed and accepted by the City. All requests are subject to final approval and audit by the City of Raleigh.

42. CONSTRUCTION INSPECTION

The Contractor shall maintain an adequate inspection system and perform all inspections to ensure that the work performed under this contract, including that of all subcontractors, is performed per the contract requirements. The Contractor shall maintain complete inspection records and shall make them available to the City. All work shall be conducted under the general direction of the Contractor. As referenced in Section 13, Inspection of Work by Other Parties, all work is subject to City inspection and tests at all places and at all reasonable times before final acceptance to ensure compliance with the terms of this contract. Such inspections by the City are for the benefit of the City and do not relieve the Contractor of its responsibility for providing adequate inspection and control measures for its work and the work of its subcontractors. Such inspections do not constitute any acceptance of the work by the City unless such partial acceptance is done in writing by the City and clearly indicates the scope of work that is being accepted by the City.

As stated in Section 16. Rejection of Work and Materials and Owner's Right to Do Work, the Contractor shall promptly replace or correct work, without charge, that is found to be in non-conformance with contract requirements unless, in the City's interest, the City consents to accept the work with an appropriate adjustment in the contractor price.

The Contractor shall promptly segregate and remove any rejected work or materials from the work area. If the contractor does not promptly remove or correct defective or rejected work, the City may replace or correct the work and charge the cost to the Contractor or terminate the contract for Default.

43. QUALITY CONTROL

The contractor shall develop and implement a quality control system on subject project to ensure the construction is performed per contract requirements. The quality control system shall consist of plans, procedures, and organization necessary to produce an end-product, which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The system shall also include all work performed by its subcontractors. The Contractor's project superintendent, separate quality control manager or other designated individual will be appointed by the Contractor to be responsible for the quality of work on the job site. The designated individual shall have the authority to require corrective action for work found to not be in compliance with the contract requirements. Deficiencies and non-conforming work shall be tracked until they have been corrected and found to be in compliance with requirements. Results of quality control inspections shall be documented on the daily report of construction.

44. DAILY REPORT OF CONSTRUCTION

The Contractor's appointed representative shall provide a daily report of construction for each day work is performed on the project. The report is a requirement of the contractor's inspection of construction requirement to ensure all work is performed in compliance with contract requirements. Failure to provide a complete and accurate daily report may result in payment being withheld until the Contractor satisfactorily

demonstrates that the work has been inspected. The report, at a minimum, shall include items as noted below to adequately describe the work:

- a. List of Prime and any subcontractors at the site.
- b. Numerical count of personnel at the site by trade/craft or subcontractor.
- c. A list of all construction equipment on site.
- d. High and low temperatures, general weather conditions.
- e. Accidents (provide specific accident information reports).
- f. Meetings and significant decisions.
- g. Work performed by location, description and firm
- h. Quality control inspections, tests and records.
- i. Unusual events.
- j. Stoppages, delays, shortages, losses.
- k. Emergency procedures taken.
- l. Inspection results or requests of governing authorities.
- m. Changes received, implemented.
- n. Services connected, disconnected.
- o. Equipment or system tests and start-ups.
- p. Any partial or substantial completions, occupancies.
- q. Quantity measurements, weight tickets or invoices to document pay items.

The Contractor shall prepare a daily construction report, recording the information concerning events at the site and submit copies to the Designer or Owner, by noon of the following workday (electronic format is acceptable). Each daily report is to be certified/signed by the authorized Contractor representative as to the facts, accuracy and completeness of the information in the daily report.

The Contractor shall document construction on the project with weekly photographs. Photographs shall be digital with resolution equivalent to a 3-inch by 5-inch color photograph. Photos shall be submitted to the Owner digitally. Any information the Contractor wishes to describe regarding the progress photos shall be accompanied with a detailed description and date. As requested by the Owner, progress photos will be provided for each payment request submitted by the Contractor. Progress photos may also be provided with daily reports.

A copy of the Contractor's proposed daily report format is to be provided to the Designer or Owner for approval prior to construction.

45. GUARANTEE AND CORRECTION OF WORK

The Contractor shall guarantee all Work to have been accomplished in conformance with the Contract Documents. Neither the final payment application nor any provision of the Contract Documents, nor partial or entire occupancy or use of the Work by the City, shall constitute an acceptance of any part of the Work not done in accordance with the Contract Documents, or relieve the Contractor of liability for incomplete or faulty materials or workmanship. The Contractor shall promptly remedy any omission or defect in the Work and pay for any damage to other improvements or facilities resulting from such omission or defect which shall appear within a period as defined in the Supplemental Conditions. In the event that the Contractor should fail to make repairs, adjustments or other remedy that may be made necessary by such defects, the City may do so and charge the Contractor the cost thereby incurred.

46. DRAWINGS AND SPECIFICATIONS

At the Notice of Contract Award, the Designer will furnish the Contractor an electronic disk or similar electronic file containing all technical contract documents. This file will include a complete set of drawing files and technical specification files which have all amendments incorporated. The disk will contain drawing files in CAD format and technical specifications in PDF format.

The electronic CAD files and the PDF files are being provided for the Contractor's use in printing hard copies of contract documents. In addition, native CADD files are provided in accordance with "AS-BUILT DOCUMENTS" paragraph for the Contractor's use in developing and maintaining as-built plans.

The Contractor shall:

- a. Check all drawings furnished immediately upon receipt;
- b. Compare all drawings and verify the figures before laying out the work;
- c. Promptly notify the Designer and City of any discrepancies;
- d. Be responsible for any errors which might have been avoided by complying with paragraphs above;
- e. Reproduce and print contract drawings and specifications as needed;
- f. Maintain, in readable condition at the job office, one complete set of permitted working drawings and specifications for the work, including all approved shop drawings, bulletins, architect's supplemental instructions, with such drawings and specifications made available for use by the Designer and City; and,
- g. Maintain at the job office, a day-to-day, "as-built" record of work-in-place that is at variance with the contract documents as required in the As-Built Drawing provision of the specification.

Omissions from the drawings or specifications or the inaccurate description of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or inaccurate described details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

47. DIFFERING SITE CONDITIONS

Should the Contractor encounter subsurface or latent conditions, or both, at the site, materially differing from those shown on the drawings or indicated in the specifications or differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in this Agreement, the Contractor shall immediately, and in no event later than ten (10) days later, give notice to the Designer/Owner of such conditions before they are disturbed. The Designer and Owner shall thereupon promptly investigate the conditions and if they find that they materially differ from those shown on the drawings or indicated in the specifications, they shall at once make such changes in the drawings and/or specifications as they may find necessary. Any increase or decrease in the Cost of the Work resulting from such changes shall be adjusted in the manner provided herein for adjustments as to extra and/or additional Work and changes. However, neither the Owner nor the Designer shall be liable or responsible for additional Work, costs or changes to the Work that should have been reasonably determined from any geotechnical, soils and other reports, surveys and analyses made available for the Contractor's review or that should have been reasonably discovered by the Contractor through site observations or through the performance of its obligations pursuant to this Agreement.

48. VARIATIONS IN ESTIMATED QUANTITIES

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price for such item shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Designer/Owner within 10 days from the beginning of the delay. Upon the receipt of a written request for an extension, the Designer/Owner shall ascertain the facts and, if justified, make an adjustment for extending the completion date.

49. WARRANTY OF CONSTRUCTION

The Contractor shall unconditionally warrant materials and workmanship against defects arising from faulty materials, faulty workmanship or negligence for a period of twelve (12) months following the date of final acceptance of the work or date of beneficial occupancy and shall replace such defective materials or workmanship without cost to the Owner.

If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Owner takes possession.

The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to owned or controlled real or personal property, when that damage is the result of--

- a. The Contractor's failure to conform to contract requirements; or
- b. Any defect of equipment, material, workmanship, or design furnished.

The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement. Refer to CSI specification sections for additional building system warranty requirements.

The Owner shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall—

- a. Obtain all warranties that would be given in normal commercial practice;
- b. Require all warranties to be executed, in writing, for the benefit of the Owner,
- c. Enforce all warranties for the benefit of the Owner, if directed by the Owner.

Where items of equipment or material carry a manufacturer's warranty, or an extended warranty required by the specifications, for any period in excess of twelve (12) months, then the manufacturer's warranty or extended warranty shall apply for that piece of equipment or material. The Contractor shall replace such defective equipment or materials, without cost to the Owner, within the manufacturer's warranty period.

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

50. CONTRACTOR EVALUATION

The Contractors overall Work performance on this project shall be fairly evaluated by the Owner and the Designer for determining qualifications to bid on future City projects. In addition to the final evaluation, interim evaluations may be prepared during the progress of the project. The Owner may also request the Contractor's comments to evaluate the Designer's performance.

51. CONTRACT CLOSEOUT ACTIVITIES

Contract closeout activities such as, but not limited to, providing Operation and Maintenance manuals, conducting all Owner training, providing final as-built record drawings, conducting warranty completion requirements, providing equipment warranty completion, final shop drawing submittals, removal of temporary construction facilities and final cleaning are subsidiary activities of the contract work. Separate payment will not be made for any activity unless otherwise specified. Final contract payment will not be made until completion and approval of all contract closeout activities. The following checklist should be used as a guide in completing contract closeout activities.

CLOSEOUT DOCUMENTATION CHECKLIST

Project _____ Project No: _____

Contractor _____ Substantial Completion Date: _____

NOTE: When all of the following documents have been completed and received, this checklist should be completed. Copies of documents should accompany the final application for payment as noted below by asterisks. **Submit 2 hard copies, 1 electronic copy of each unless otherwise noted.**

- 1. Operations and Maintenance Manuals
- 2. Approved shop drawings and submittals
- 3. Certificate of Substantial Completion with attached punch list endorsed and dated by the architect.
- 4. Change orders
- 5. Final Approved Application for Payment with the final sales tax report.
- 6. Pest control final inspection report.
- 7. Consent of Surety to Final Payment
- 8. Contractor's Affidavit of Release of Liens AIA G706A (properly signed, notarized, etc.)
- 9. Contractor's Affidavit of Payment of Debts and Claims AIA G706
- 10. Certificate of Occupancy
- 11. Marked copy of the Specifications including addenda, contract modifications and indicating the actual product installation v/s specified.
- 12. Certification letter from Contractor stating that no asbestos containing materials were used.
- 13. Certification letter from Architect (or Engineer) regarding asbestos, per EPA regulations.
- 14. Evidence of final continuing insurance coverage.
- 15. Transmittal indicating keys have been given to the Owner.
- 16. Final list of all subcontractors with names, addresses, and phone numbers.
- 17. As Built drawings – 1 hard copy, 1 electronic copy
- 18. Certified Testing and Balancing Report
- 19. Extra materials list with a label indicating manufactures name & model numbers.
- 20. Field Reports
- 21. Damage or settlement survey reports
- 22. Property survey reports
- 23. CAD files; as-builts from the Architect
- 24. Site and Facility Keys
- 25. Facility Training Completed
- 26. Property survey reports
- 27. Warranties
- 28. Landscape 11-month warranty date: _____

CITY OF RALEIGH COST CHANGE PROPOSAL
Authorizing use of Owner's Contingency Allowance with Construction Contract

Contractor Name & Address: Date:

Project Name & ID: CCP No.
Note: if CCP is a credit, please enter amounts as negative.

Description of Change:

1	Products (Itemized breakdown attached)		\$ -	
2	Rental of Equipment		\$ -	
	SUBTOTAL of line 1 + line 2 =		\$ -	ITEM A
3	Labor (Itemized labor hours attached)		\$ -	
4	Insurance (Worker's Comp, SS, etc.) <input type="text"/> % of line 3, Do Not exceed 30%		\$ -	
	SUBTOTAL: (ITEM A)+line 3+line 4 =		\$ -	ITEM B
5	Overhead & Profit 15% MAXIMUM of ITEM if add or 10% of ITEM B if deduct <input type="text"/> %		\$ -	
	SUBTOTAL: (ITEM B)+line 5		\$ -	ITEM C
6	Sales Tax on subtotal of Products and Rentals (ITEM A)		\$ -	
	SUBTOTAL: (ITEM C)+line 6		\$ -	ITEM D
7	Subcontracted Work (If applicable, with Itemized breakdown)		\$ -	
8	Prime Contractor's Overhead & Profit (5% of line 7) 5% MAXIMUM if this is an add; 0% if this is a deduct <input type="text"/> %		\$ -	
	SUBTOTAL: line 7+line 8		\$ -	ITEM E
	SUBTOTAL: ITEM D+ITEM E		\$ -	ITEM F
9	Performance/Payment Bonds <input type="text"/> % of ITEM F		\$ -	
	TOTAL COST CHANGE PROPOSAL (CCP): ITEM F+line 9		\$ -	ITEM G
	Extension of Time Requested: <input type="text"/> days			

Proposal by: (Contractor)

Accepted by: (Designer/Engineer of Record)

Authorization for Debit/Credit to be applied to Project Allowance(s)

10 Original Amount of Owner's Construction Contingency Allowance		\$ -	
11 Prior Total of CCPs approved (enter credits as negative)		\$ -	
12 Current CCP Authorization Request:		\$ -	
13 Total CCP's to date		\$ -	
14 Total Contingency Funds Remaining		\$ -	

TOTAL CCPs approved to date \$ - Use this amount for line 11 on next CCP.

**** Notes:** _____

By signature below, the City of Raleigh authorizes the use of the Allowance funds and authorizes the above CCP to proceed in accordance with the construction contract. Any accepted time extension will be processed as a change order.

For the City of Raleigh: _____

SAMPLE

End of General Conditions

SUPPLEMENTARY GENERAL CONDITIONS

1. PROJECT TIME & DAMAGES

The Contractor shall commence work to be performed under this agreement on a date to be specified in writing from the City and shall fully complete all work hereunder within one-hundred fifty (150) Consecutive Calendar Days. For each day in excess of the contract number of days, the contractor shall pay the owner the sum in accordance with Section 2. Failure or Delay in Completing Work on Time as liquidated damages (per day) reasonably estimated and agreed upon with the signing of the contract. The liquidated damages are to cover any losses incurred by the Owner by reason of the failure of the Contractor to complete the work within the time specified such time being the essence of this contract and a material consideration thereof.

2. FAILURE OR DELAY IN COMPLETING WORK ON TIME

Time is an essential element of the Contract, and any delay in the prosecution of the work may inconvenience the public or interfere with the daily operations of the department and demand additional time for supervision. For this reason, it is important that the work be pressed vigorously to completion. Should the Contractor fail to complete the work within the time stipulated in the contract or within such extra time that may be allowed, charges shall be assessed against any money due or that may become due the Contractor.

The amount of such damages for this project are \$500.00 per day. This amount is hereby agreed upon as fixed liquidated damages due the City after the expiration of the time for completion specified in the Contract. The Contractor and his Surety shall be liable for liquidated damages in excess of the amount due the Contractor on the final payment.

These fixed liquidated damages are not established as a penalty but are calculated and agreed upon in advance by the City due to the uncertainty and impossibility of making a determination as to the actual and consequential damages which are incurred by the City, and the public as a result of the failure on the part of the Contractor to complete the Work on time.

Application of Damages:

Liquidated damages shall start in accordance with the above schedule upon notification to the Contractor in writing that the apparent Contract Time has been consumed.

- a. Deduction from Partial Payments: Liquidated damages, as they accrue, will be deducted from periodic payments, such deductions shall be in addition to the retainage provided for the Contract.
- b. Deduction from Final Payment: The full amount of liquidated damages will be deducted from the final payment to the Contractor and /or his Surety.
- c. No liquidated damages charged for delay by the City: In case of default of the Contract and the subsequent completion of the Work by the City as hereinafter provided, the Contractor and his Surety shall be liable for the liquidated damages under the Contract, but no liquidated damages shall be chargeable for any delay in the final completion of the Work by the City due to any unreasonable action, negligence, omission or delay of the City. In any suit for the collection of or involving the assessment of liquidated damages, the reasonableness of the amount shall be presumed. The liquidated damages referred to herein are intended to be and are cumulative and shall be in addition to every other remedy now or hereafter enforceable at law, in equity, by statute, or under the Contract.

The Contractor shall be liable for and shall pay to the City the above stated amount as fixed, agreed and liquidated damages for each day beyond the designated completion date until the project is completed and accepted.

3. EMERGENCY CONTACTS

The Contractor shall provide by letter names, telephone numbers and addresses of two responsible company representatives prior to beginning work. These two representatives are to be capable and authorized to respond to emergencies, so which arise during the project, nights, holidays or week-ends. The Contractor, by submitting these person's names, certifies that at least one representative will be available for on call emergency response at all times.

4. OPERATIONS OF OWNER'S FACILITIES

The Contractor agrees that all Work done under the Contract Documents shall be carried on in such a manner so as to ensure the regular and continuous operation of the adjoining or adjacent facilities. The Contractor further agrees that the sequence of operations under the Contract Documents shall be scheduled and carried out so as to ensure said regular and continuous operation. The Contractor shall not close any areas of construction until so authorized by the Owner. The Contractor shall control his operations and those of his Subcontractors and all suppliers, to assure the least inconvenience to the public. Under all circumstances, safety shall be the most important consideration.

- (b) The Owner will occupy the site and existing building during construction except as herein noted. Cooperate with the Owner to minimize conflicts and facilitate owner usage. Perform the work so as not to interfere with the Owner's operations.
- (c) The Owner reserves the right to occupy and place and install equipment in selected construction areas prior to Substantial Completion without accepting the Work in total.

5. PRECONSTRUCTION PHOTOS/VIDEO

The Contractor shall document pre-existing conditions on the project site and submit the photos / video in electronic format. The intent of these photos / video is to document the project conditions such as the pavement and driveways; the condition of the curb & gutter; the condition of the adjoining site boundary; installed improvements and drainage; the condition of the grassing; the condition of any structures and other improvements prior to the start of construction.

The Contractor may also include any pre-existing conditions it wants brought to the attention of the Designer and Owner by including notes and time position on the index sheet. The documentation must be submitted before mobilization to the site.

6. SANITARY FACILITIES

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workers. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and City of Raleigh. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations. No separate payment will be made for providing these

7. MATERIAL TICKETS

For all work to be paid based on the basis of a material quantity, the Contractor shall turn in all material tickets from the source of supply for the purpose of payment to the Owner on a daily basis. Such tickets shall be totaled by the Contractor and included on the Contractor's daily report of construction.

8. UTILITY LOCATES

Utilities as shown on the plans are intended to represent general locations only. It shall be the responsibility of the Contractor, prior to construction, to contact appropriate utility companies and utility locates and precisely locate any utilities (both horizontally and vertically) which could be affected by the proposed construction. The Contractor shall be responsible for repair of any damage to the utilities as well as any other damage which may be caused due to the disturbance of the utilities.

If required for construction, the Contractor shall dig sample hand holes to uncover the utility. The digging of sample hand holes shall be coordinated with the Designer and Owner who assist the Contractor to determine the number and location of such holes. There is no line item to pay for such located work, this work is considered incidental to other pay items.

9. NCDOT ENCROACHMENT

On State maintained roads, the NCDOT will issue an encroachment agreement for the project. If encroachment agreement has not been issued at the time of bid opening, the Contractor will be required to incorporate all NCDOT standard encroachment requirements in their base bid for the various items in the contract. No separate payment will be made for work required in accordance with the standard encroachment agreement. Any major deviations from the approved plans and specifications required to comply with the final encroachment agreement will be identified by Addendum before bids are opened, or by change order after contract award, if required.

10. EROSION CONTROL MAINTENANCE AND CONSTRUCTION METHODS

The provisions and requirements of the erosion control permit will be in accordance with City and State standards and specifications for soil erosion and sediment control. Soil erosion control measures shall be installed as described prior to any land disturbing work being done. All erosion control measures must be maintained so that they prevent soil erosion and sediment losses throughout the project, and will remain in place until the denuded areas are stabilized and the permanent seed has germinated. The entrapped sediment from all temporary measures shall be removed before 50% of the original sediment storage capacity has been depleted.

The Contractor shall schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. The Contractor shall comply with the requirements herein regardless of whether or not a National Pollution Discharge Elimination System (NPDES) permit for the work is required.

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Designer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Designer. The Contractor shall not utilize the construction method until it is approved by the permitting agency.

11. CITY OF RALEIGH STANDARDS

Any work defined to follow the City of Raleigh Standards shall follow the appropriate City of Raleigh Specifications. These are available from the City or Raleigh website.

12. ESTIMATED QUANTITIES

Contract prices submitted by the Contractor in the Proposal shall be full compensation for all labor, materials, equipment, tools, specialties, and incidentals necessary for the Contractor to fully complete the Work as shown on the Drawings and specified in the Contract Documents to be performed under this Contract.

Estimated quantities stipulated in the Proposal or other parts of the Contract Documents are solely for the purpose of comparing the bids received for the Work and determining an initial contract price.

- a. The actual quantities of work done and materials furnished can differ from the estimated quantities shown in the Proposal.
- b. The final contract price will be based upon the final quantities of pay items incorporated into the Work adjusted by these Contract Documents.

The method of measurement and computations used in determining the quantity of the various pay items incorporated into the work will be those methods generally recognized as accepted engineering practice. Adjustments in unit price or time for variations in quantities are subject to the Contract General Provisions entitled Variations in Estimated Quantity.

Any work required for which an estimated quantity and unit price has not been provided in the Contract Documents shall be considered incidental and separate payment will not be provided.

13. TEMPORARY CONSTRUCTION FACILITIES

The Contractor shall prepare a site plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor for temporary office area, the number of trailers to be used, avenues of egress to the fenced area and details of the fence installation. Temporary utility services shall also be located on the plan. Any areas which may have to be graveled to prevent the tracking of mud and location of any construction entrances shall also be identified. The Contractor shall also indicate if the use of a supplemental, material storage or other staging area is desired.

The Contractor shall, at its own expense, construct access and haul roads necessary for proper prosecution of the work under this contract. The Contractor shall provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust shall be adequate to ensure safe operation at all times.

The Contractor shall be responsible for the security of its own facilities and equipment. In addition, the contractor shall notify the appropriate law enforcement agency of any requested periodic security checks of the temporary project field office. Areas used by the Contractor for the office area and storage of equipment or material, or other use, shall be restored to the original or better condition.

14. TRAFFIC CONTROL

Work and access may be restricted as noted in the contract. Work hours may vary depending on traffic conditions and constraints. Traffic control plans may be required as required in the contract. Notice may be required to Wake County, City or NCDOT.

It is the Contractor's responsibility to provide all necessary traffic control and signage and provide for maintenance of traffic for the work associated with this project. The cost for this work is to be included in the bid item included in the contract or in the existing unit prices or contract amount if no bid item is included. Traffic control shall be provided in accordance with the current edition of the Manual of Uniform Traffic Control Devices and appropriate City and NCDOT requirements.

15. MAINTENANCE OF AS-BUILT RECORD DRAWINGS

Absent of a more specific contract requirement elsewhere in the Contract Documents, the contractor shall maintain and mark-up a reproducible set of prints at the project site to show as-built conditions. This set of prints shall become the record drawings and shall be kept current and available for review by the Designer and Owner at all times. All changes from the contract drawings which are made in the work, or additional information which might be uncovered during the construction, including uncharted utilities, shall be accurately and neatly recorded as they occur by means of details and notes to the drawings. All changes and/or required additions to the preliminary record drawings shall be clearly

identified in a contrasting color and which is compatible with reproduction of the preliminary record drawings.

The record drawings shall be updated by no less frequently than weekly during the construction. Measurements shall be shown for all change of direction points and all surface or underground components such as valves, manholes, drop inlets, cleanouts, meter, etc. The general depth range of each underground utility line shall be shown or installation detail referenced (i.e., 3 to 4 feet in depth). The description of exterior utilities includes the actual quantity, size, and material of utility lines. Any request for information and / or Designer instructions that depict revisions to the record drawings shall be identified.

The correct grade or alignment of roads, structures or utilities if any changes were made from contract drawings shall be noted. Correct elevations, if changes were made in site grading, shall be noted. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor, including but not limited to fabrication, erection, installation plans and shop drawings shall be noted. The location and dimensions of any changes within the building or structure shall be noted.

As a condition of each payment request, the Contractor and Designer shall verify that as built drawing conditions are being maintained. If the Contractor fails to maintain the as-built drawings as required herein, the Owner may deduct an amount representing the estimated monthly cost of maintaining the as-built drawings from the monthly progress payment.

16. RECORD DRAWINGS FOR SUBSTANTIAL COMPLETION

The Contractor shall provide a marked-up copy of the currently maintained set of record drawings to the Designer for review prior to scheduling the substantial completion inspection. The Designer shall verify that the submitted drawings provide sufficient information for the Owner to adequately operate and maintain the project until the final approved set of as built drawings are provided. If acceptable, at the time of the substantial completion inspection, the Contractor shall deliver a copy of these record drawing for the Owner's use until the final approved as-built record drawings are provided.

17. FINAL CLEANING

Final cleaning of the premises shall be left broom clean. Stains, foreign substances, and temporary labels shall be removed from surfaces. carpet and soft surfaces shall be vacuumed. equipment and fixtures shall be cleaned to a sanitary condition. Filters of operating equipment shall be replaced. Debris shall be removed from roofs, drainage systems, gutters, and downspouts. Paved areas shall be swept and landscaped areas shall be raked clean. The site shall have waste, surplus materials, and rubbish removed. The project area shall have temporary structures, barricades, project signs, and construction facilities removed. A list of any uncompleted clean-up items shall be submitted on the day of final inspection.

18. SALES TAX

North Carolina Sales Tax and Use Tax and Local Option Sales and Use Tax do apply to materials entering into Municipal Work (N.C. Sales and Use Tax Regulations No. 42 & 57, Paragraph A), and such costs shall be included in the bid proposal and contract sum.

The procedures for reporting sales taxes paid by the contractor are as follows:

- a. It shall be the general contractor's responsibility to furnish the owner documentary evidence showing the materials used and sales tax paid by the general contractor and each of his sub-contractors and where paid. Any county sales tax included in the contractor's statements must be shown separately from the state sales tax. If more than one county is shown, each county shall be listed separately.

- b. The documentary evidence shall consist of a certified statement, by the general contractor and each of his subcontractors individually, showing total purchases of materials from each separate vendor and total sales taxes by each county paid each vendor. The certified statement must show the invoice number (s) covered and inclusive dates of such invoices. State sales tax shall be listed separately from county sales tax. If more than one county is shown, each county shall be listed separately.
- c. Materials used from general contractor's or sub-contractor's warehouse stock shall be shown in a certified statement at warehouse stock prices.
- d. The general contractor shall not be required to certify the sub-contractor's statements.
- e. The documentary evidence to be furnished to owners eligible for sales or use tax refunds covers sales and or use taxes paid on building materials used by contractors and sub-contractors in the performance of contract with churches, orphanages, hospitals not operated for profit and other charitable or religious institutions or organizations not operated for profit and, incorporated cities, towns, and counties in this State. The documentary evidence is to be submitted to the above-named institutions, organizations and governmental units to be included in claims for refunds to be prepared and submitted by them to obtain refunds provided by G. S. 105-164.14 (2) and (3) of the 1961 Statute and is to include the purchases of building materials, supplies, fixtures and equipment which become a part of or annex to buildings, or structures being erected, altered or repaired under contract with such institutions, organizations, or governmental units.
- f. The contractor is advised that all requests for payment, partial or final, for work completed under this contract must include a sales tax report submitted in accordance with the procedures outlined above.



CITY OF RALEIGH – PARKS, RECREATION AND CULTURAL RESOURCES

222 W. Hargett Street • Suite 601 • Raleigh, North Carolina 27601
Phone: (919) 996-3285 • Fax: (919) 996-7486 • email: parkplan@raleighnc.gov

CERTIFICATE OF FINAL COMPLETION / ACCEPTANCE (Sample)

Project Title / Facility Name: _____ Project Location: _____

Consultant/Architect/Engineer: _____ Address: _____

Contractor: _____ Address: _____

City Contract #: _____ Final Project Contract Amount: _____

The Work performed under this Contract has been reviewed by the Owner, Architect/Engineer and Contractor and per the contract documents, including all addenda and approved change orders is complete, has reached Final Acceptance and found in accordance with the General Conditions of the Construction Contract. The final inspection of the project was made on (enter date-month day, year), and the Architect/Engineer and Owner certify that all punch list items have been completed.

The Date of Final Acceptance of the Work is defined as the Date Certified by the Architect/Engineer upon which the Work is fully complete in all aspects, **and** which the Owner accepts the Contractor's work as complete. The Date of Final Acceptance of the Project, or portion thereof designated above, is also the basis for commencement of the DURATION of applicable warranties required by the Contract Documents. The Warranty Period is defined in the Contract Documents as commencing with Substantial Completion(s) and continuing for one (1) calendar year from the Date of Final Acceptance. This date shall correspond to the date of the Architect/Engineer's approval certification on the final pay application unless otherwise agreed upon in writing.

The Contractor(s) certify that final payments have been made to all material suppliers, employees and subcontractors and copies of their valid lien waivers are attached.

Builder's risk insurance was cancelled as of (enter date-month day, year) and a copy of the cancellation notice is attached hereto.

The total time for completion as allowed in the contract plus granted time extensions is (enter #) days. The actual time required for completion was (enter #) days and the contractor(s) is/is not (are/are not) liable for liquidated damages. The Contractor(s) has/have been notified of any proposed assessments of liquidated damages. Copies of each notification and any letter of recommendations as to the liquidated damages amount are attached.

In the event of a disparity between the date of the Architect/Engineer's approval and this form, if no other written agreement exists as to the date of final acceptance, this form shall constitute such agreement and it shall govern as the date of Final Acceptance. There are no unsettled disputes between the Owner and Contractor, the Owner and Designer, or the Designer and the Contractor at this time.

Copies of the following items have been submitted / are attached as indicated below:

Written guarantees: _____ Affidavits: _____ Contractor's Affidavit of Release of Liens: _____

Consent of Surety to Final Payment: _____ Contractor's Affidavit of Payment of Debts and Claims: _____

Electronic As-Built Drawings: _____ O&M manuals: _____ Complete copies of all inspections paperwork: _____

Architect/Engineer's Final Report: _____ Other required closing papers of the contractor: _____

Date of Substantial Completion:	Date of Final Acceptance:	Date of Warranty Expiration:

Consultant / Architect / Engineer:

by: _____
typed name and title *signature* *date*

Contractor:

by: _____
typed name and title *signature* *date*

City of Raleigh:

by: _____
typed name *signature* *date*

**CITY OF RALEIGH CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS FOR FINAL
CONSTRUCTION PAYMENT (SAMPLE)**

TO: _____ CITY CONTRACT #: _____
(Owner)

CONTRACT FOR: _____ CONTRACT DATE: _____

PROJECT: _____
(name, address)

State of: _____ County of: _____

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

SUPPORTING DOCUMENTS CONTRACTOR:

ATTACHED HERETO:

Address:

By

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

Notary Public

My Commission Expires: _____

CONTRACTOR’S AFFIDAVIT OF FINAL PAYMENT OF DEBTS AND CLAIMS (Sample)

Project Name: _____

Project Location - County of: _____ **State of:** _____

City Contract # _____ **Owner:** City of Raleigh,

Designer: _____

Contractor: _____ **Surety:** _____

The undersigned, pursuant to the General Conditions of the contract and being duly sworn, deposes and says that they are _____ of _____ and that they have full and official knowledge of all and every debt, claims and obligation for all work, labor, services and materials which have entered into and become a part of the public facilities constructed under City of Raleigh Construction Contract Number _____ and, acting in their official capacity, and for the specific purpose of obtaining the funds due on this final estimate, they further depose and say that all debts, claims or obligations for such work, services, labor and materials have been fully and completely paid and discharged in good and lawful money of the United States of America or by evidence of exchange or trade acceptances endorsed and guaranteed by a solvent National or State bank, and that there are no suits for damages against the contractor, pending, prospective or otherwise, in consequence of their operations on the said project except as follows: _____

I, _____, a notary public of the County and State aforesaid, hereby certify that _____ personally known to me to be the affiant in the foregoing affidavit, personally appeared before me this day and having been by me duly sworn, deposes and says that the facts set forth in the above affidavit are true and correct.

Witness my hand and official seal this the _____ day of _____, 20 _____.

Printed Name of Notary Public

Signature of Notary Public

My Commission Expires:
(SEAL)

SECTION 01 02 00 – GENERAL SITEWORK REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The provisions of the Contract Documents apply to the work of this Section.

1.2 SITEWORK LAYOUT

A. Monuments and Benchmarks

1. Maintain all monuments, property corners, benchmarks and other reference points.
2. If these are disturbed or destroyed during construction operations, have them replaced by a surveyor licensed in the State of North Carolina. This replacement shall be at no additional expense to the Contract.

B. Laying out the Work.

1. Locate all existing benchmarks and other reference points.
2. Protect these points throughout construction.
3. Layout work utilizing these reference points.

C. Record Drawings

1. Maintain a record of the locations of all underground utilities and piping.
2. Maintain a record of any variations of the work.
3. Record Drawings shall be certified by a Land Surveyor registered in the State of North Carolina.
4. Submit these record drawings at Project Closeout.

1.3 MAINTENANCE OF TRAFFIC

- A. Maintain vehicular and pedestrian traffic across the frontage of this project. Comply with all applicable safety requirements.

1.4 CORRELATION OF CONSTRUCTION DOCUMENTS

- A. Review construction documents thoroughly prior to the start of construction.
- B. Report any conflict or discrepancy discovered in the Construction Documents to the Designer prior to the start of construction.
- C. Report any conflict or discrepancy discovered between the Construction Documents and state and local governmental regulations to the Designer prior to the start of construction.

1.5 PROJECT CONDITIONS

- A. The conditions existing at the time of inspection for bidding purposes will be maintained by the Owner to the extent practical. However, minor variations may occur due to natural occurrences prior to the start of work.

- B. Should chartered, uncharted or incorrectly chartered utilities be encountered during demolition, contact the Owner immediately for instructions. Cooperate with Owner and utility companies to keep services and facilities in operation.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.1 PROJECT CLEAN UP

- A. Clean site as construction progresses. Do not allow trash or other waste materials to accumulate.
- B. Prior to requesting the punch-list inspection, clean the site to the following requirements:
 - 1. Power wash all walks and pavements.
 - 2. The remainder of the site shall be broom clean.
 - 3. Remove all trash and debris.

3.2 EXISTING FACILITIES

- A. Preserve existing signs, markers, guardrails, and fences in their original condition unless written permission is obtained for their removal and replacement.
- B. Replace damaged items at no additional cost to the Contract.

END OF SECTION 01 02 00

SECTION 011000 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 PROJECT INFORMATION

- A. Project Identification: Moore Square Park Dog Run
 - 1. Project Location: 201 S. Blount Street., Raleigh NC
 - 2. Project Number: 274-PR-MSDR-2025
- B. Owner: City of Raleigh
 - 1. Owner's Representative: Terry Naranjo, Capital Projects Manager
919-996-4796
terry.naranjo@raleighnc.gov

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and as described below.
 - 1. Construction of a site improvements at an existing City of Raleigh park located at 201 S. Blount, Raleigh, NC. Work at this site consists of:

Construction of new concrete pad, 4' Steel fencing and gates. Tree protection fencing within Moore Square Park at 201 S. Blount Street, Raleigh, NC, a City of Raleigh public park. Refer to project Plans and Project Manual for complete description of project scope.
- B. Type of Contract:
 - 1. Project will be constructed under a single prime contract.

1.3 PRODUCTS PROVIDED BY OWNER

- A. Products provided by Owner: Owner will provide the following products for assembly and installation by Contractor:
 - 1. No items to be provided by Owner.

1.4 CONTRACTORS USE OF SITE

- A. Failure to visit the site will not relieve the Contractor from requirements for furnishing materials or performing work that may be required to complete work in accordance with the Contract.
- B. Contractor shall have use of Project site, within the construction limits indicated on the Plans, for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project as deemed necessary by the Owner.

- C. Operations of the Contractor shall be limited to the area defined by the Construction/Work limits on the Plans. Regrade and revegetate (as determined by Owner) all areas beyond contract limits disturbed during construction.
- D. Contractor assumes full responsibility for the protection and safekeeping of products obtained under this Contract and stored on the site.
- E. Obtain and pay for the use of additional storage or work areas needed for operations unless such facilities are otherwise provided by Owner.
- F. Contractor is responsible for returning any areas or facilities, as provided by Owner to the Contractor for storage or operations, that are disturbed during use to their original conditions, unless otherwise instructed by Owner.

1.5 WORK RESTRICTIONS

- A. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit site work to working hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, unless otherwise authorized by Owner. Weekend work hours require written approval from Owner.
- C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Owner not less than two days in advance of proposed disruptive operations.
 - 2. Obtain Owner's written permission before proceeding with disruptive operations.
- D. Restricted Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

1.6 EXISTING UTILITIES

- A. Protect all existing utilities from damage during construction. The Contractor shall have utility companies field locate facilities prior to beginning construction and shall immediately notify the Owner of any utilities encountered which are not indicated on the plans.
- B. The Contractor shall notify the Owner immediately if a utility is damaged. The Contractor shall be fully responsible at no additional cost to the Owner, for all repairs including penalties, if any, due to disruption of service.

1.7 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

PART 2 - PRODUCTS
(Not Used)

PART 3 - EXECUTION
(Not Used)

END OF SECTION 01 10 00

SECTION 01 21 00 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
 - 1. Certain items are specified in the Contract Documents by Allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor.
 - 2. If necessary, additional requirements will be issued by approved City of Raleigh Cost Change Proposal Authorizing Use of Owner's Contingency Allowance within Construction Contract.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.
 - 2. Quantity allowances.
 - 3. Contingency allowances.

1.3 INFORMATION SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.4 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.5 LUMP-SUM ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Engineer under allowance and shall include taxes, freight, and delivery to Project site.

- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials selected by Designer under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.6 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Engineer for Owner's purposes and only by written approval through the City of Raleigh Cost Change Proposal Authorizing Use of Owner's Contingency Allowance within Construction Contract that indicate amounts to be charged to the allowance.
- B. Approved City of Raleigh Cost Change Proposal Authorizing Use of Owner's Contingency Allowance within Construction Contract authorizing use of funds from the contingency allowance will include Contractor's related costs and overhead and profit margins as defined by general and supplemental conditions found in this project manual.
- C. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by approved City of Raleigh Cost Change Proposal Authorizing Use of Owner's Contingency Allowance within Construction Contract.

1.7 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
 - 3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and

installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No. 1: For Owner's Contingency

1. Description: Contractor to provide unit price as shown on the bid form.
2. Unit Cost Unit of Measurement: Units as pre-determined by Unit Cost on Bid Proposal.
3. **Allowance Amount: \$5,000 (Five Thousand Dollars and 00/100 cents)**
4. Coordinate quantity allowance adjustment with all corresponding sections of the Contract Documents.

END OF SECTION 01 21 00

SECTION 01 22 00 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing unit prices.
 - 1. Unit price is an amount incorporated in the Contract, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3 and on Bid Proposal Form. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Unit Price No. 1: Unsatisfactory soil removal
 - 1. Description: Contractor to provide unit price for all costs associated with over excavating, hauling off, and replacing unsatisfactory soils.
 - 2. Unit of Measurement: Unit cost per one (1) cubic yard of unsatisfactory soils removed.

B. Unit Price No. 2: ABC Fill placement

1. Description: Contractor to provide unit price for all costs associated with the furnishing, delivery, placement, and grading of ABC fill soil on project site.
2. Unit of Measurement: Unit cost per one (1) cubic yard of ABC fill soil placed.

C. Unit Price No. 3: Concrete Pad

1. Description: Contractor to provide unit price for all costs associated with the placement of concrete pad.
2. Unit of Measurement: Cost per Square Yard

END OF SECTION 01 22 00

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
 - 1. Section 012100 "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.
 - 2. Section 012200 "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.

1.3 MINOR CHANGES IN THE WORK

- A. Owner will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on Field Order form.

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Owner will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Owner are for informational purposes only and are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within seven (7) days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and

- finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- e. Quotation Form: Use Cost Change Proposal Authorizing Use of Owner's Contingency Allowance within Construction Contract.
 - f. Authorized approval in writing is required for the contractor to proceed with any change.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Owner.
- 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Proposal Request Form: Use Cost Change Proposal Authorizing Use of Owner's Contingency Allowance within Construction Contract form.

1.5 ADMINISTRATIVE CHANGE ORDERS

- A. Allowance Adjustment: See Section 012100 "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.
- B. Unit-Price Adjustment: See Section 012200 "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.

1.6 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Change Proposal Request, Owner's Representative will issue a Change Order for signatures of Owner and Contractor on the City of Raleigh's Contract Change Order Form.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 29 00 – PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
 - 1. Section 012100 "Allowances" for procedural requirements governing the handling and processing of allowances.
 - 2. Section 012200 "Unit Prices" for administrative requirements governing the use of unit prices.
 - 3. Section 012600 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to Owner at earliest possible date, and no later than ten (10) days following issuance of the project Notice to Proceed. In no circumstances shall initial schedule of values be submitted later than fifteen (15) days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents and project specification

sections as a guide to establish line items for the schedule of values. Provide at least one (1) line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location / street address.
 - b. Name of Project Owner.
 - c. Project Owner's Project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
2. Arrange schedule of values consistent with format of AIA Document G703.
3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts in excess of five percent (5%) of the Contract Sum.
4. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site.
 - b. Items must be physically onsite to be included in payment applications except for extreme circumstances. Any such outstanding circumstances and conditions (i.e. special storage requirements, exceptionally long lead time items, special procurement requirements etc.) must be reviewed and approved by the Owner and Owner prior to inclusion on pay applications.
 - c. All items stored off-site must have proof of sale / receipt by the contractor and photographic documentation submitted indicating materials are in the physical possession of the Contractor and that proper storage accommodations are being provided in the interim period before installation.
5. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
6. Overhead Costs: Include total cost and proportionate share of general overhead and profit for each line item.
7. Overhead Costs: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.
8. Closeout Costs. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent (5%) percent of the Contract Sum and subcontract amount.
9. Closeout Costs indicated must also accurately reflect all O&M activities, documentation, training and deliverables as required by the contract documents.
10. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction

Change Directive.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Owner and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Times: Submit Application for Payment to Owner by the 15th of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
 - 1. Submit draft copy of Application for Payment seven (7) days prior to due date for review by Owner.
- D. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
 - 1. Other Application for Payment forms proposed by the Contractor shall be acceptable to Owner. Submit forms for approval with initial submittal of schedule of values.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Owner will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- F. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
 - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
 - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 - 3. Provide summary documentation for stored materials indicating the following:

- a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
 - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- G. Transmittal: Submit signed and notarized copies in digital pdf file format by email of each Application for Payment to Owner by a method ensuring receipt within twenty-four (24) hours. Include waivers of lien and similar attachments if required.
1. Transmit each copy with a transmittal form listing all attachments and recording appropriate information about application.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).
 4. Combined Contractor's construction schedule (preliminary if not final) incorporating Work of multiple contracts, with indication of acceptance of schedule by each Contractor.
 5. Products list (preliminary if not final).
 6. Schedule of unit prices.
 7. Submittal schedule (preliminary if not final).
 8. List of Contractor's staff assignments and emergency contacts.
 9. List of Contractor's principal consultants.
 10. Copies of all building permits.
 11. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 12. Initial progress report.
 13. Report of preconstruction conference.
- I. Application for Payment at Substantial Completion: After Owner issues the Certificate of Substantial Completion, submit an Application for Payment showing one hundred (100%) percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited to, the following:

1. Evidence of completion of Project closeout requirements.
2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Contract Sum.
4. AIA Document G706.
5. AIA Document G706A.
6. AIA Document G707.
7. Evidence that claims have been settled.
8. Final liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 29 00

SECTION 01 31 19 - PROJECT MEETINGS

PART 1 - GENERAL (Not Used)

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PRECONSTRUCTION CONFERENCE

1. Preconstruction Conference: A meeting will be scheduled by the Owner following full execution of Contract. Administrative requirements such as product lists, schedule of values, payment applications, project schedule, progress charts, change order procedures, and project closeout will be reviewed in detail.

B. PROGRESS MEETINGS

1. Progress meetings shall be held EVERY TWO WEEKS at a time and place to be designated by the Owner. The General Contractor shall organize and arrange these meetings while also documenting meeting discussions and actions. These meetings shall be attended by the Owner's Representative, Project Engineers and Designers, and the General Contractor's Project Manager and Superintendent. Also invited, as appropriate to items under discussion, will be selected subcontractors and suppliers. The following items will be discussed:
 - a. Review of work progress since previous meetings.
 - b. Field Observations, problems, conflicts.
 - c. Problems which impede construction schedule.
 - d. Corrective measures and procedures to regain projected schedule.
 - e. Revisions to construction schedule.
 - f. Plan progress, schedule during succeeding work period.
 - g. Coordination of schedules.
 - h. Maintenance of quality standards.
 - i. Review submittal schedules; expedite as required.
 - j. Review proposed changes for effect on other trades, construction schedule and completion date.
 - k. Coordination of separate contracts.
 - l. Other business as required.
2. The persons representing the Contractor at the meetings shall have the authority to commit the Contractor to solutions agreed upon in the meetings. To the maximum extent possible, assign the same person or persons to represent the Contractor at meetings throughout the progress of the work.

3. Additional Progress Meetings: Owner reserves the right to call additional Progress Meetings as necessary for project coordination and to ensure General Contractor conformance to the Contract.
4. Coordination Meetings: The progress meetings shall in no way be considered a substitute for Contractor / Subcontractor coordination meetings which may be called by the Owner to occur as needed.

END OF SECTION 01 31 19

SECTION 01 33 00 - SUBMITTALS

PART 1 - GENERAL

1.1 SUBMITTALS LIST, SCHEDULE, AND PROCEDURES

- A. Refer to City of Raleigh General Conditions and Supplemental General Conditions under this Contract.
- B. Submittal: Within 14 days after award of contract, and before any items are submitted for review, submit to the Designer and Owner a PDF version of the submittal list and schedule.
- C. Schedule: Compile a complete schedule of all submittals anticipated to be made during process of the work. Include a list of each type of item for which Contractor's drawings, Shop Drawings, Product Data, Certificates of Compliance, Samples, Warranties, or other types of submittals are required. Upon acceptance by the Designer and Project Manager, the Contractor will be required to adhere to the schedule except when specifically permitted otherwise.
- D. Code Designation: On the schedule, designate each item with a number code utilizing the Specification Section six-digit numbers. Each submittal shall be marked with the same code designation.
- E. Coordination: Coordinate the Schedule with Subcontractors and materials suppliers.
- F. Revisions: Revise and update the schedule on a monthly basis as necessary to reflect conditions and sequences. Promptly submit revised schedules to the Engineer for review.
- G. Transmittals: Include a transmittal letter with each submittal, identify item by above code designation and reference to Specification Section. Use a separate transmittal for each submittal.
- H. Each submittal shall also have a chronological submittal number. Any resubmittal shall have the original submittal number and a letter in the order for each resubmittal.
- I. Deviations: Clearly and distinctly denote any deviations from the Contract Documents in submittals.
- J. Submittals shall be made early enough to account for processing described below and a minimum of 14 days for review by the Engineer and project designers and Owner.
- K. Routing: Engineer and Owner will each retain one PDF copies of each submittal for file. PDF copies to be returned to the Contractor for his file.

1.2 SHOP DRAWINGS

- A. Shop drawings submitted for this work shall make particular note of field-measured dimensions, as-built conditions, and conditions requiring special coordination with other contractors and the requirements of the activities of the Owner.
- B. Refer to City of Raleigh General Conditions.

1.3 PRODUCT DATA

- A. Submit PDF versions brochure material and required samples, unless otherwise noted by the Technical Specification Section.
- B. Reference: Reference product data to applicable Drawings and Specification Section to facilitate ease and accuracy of checking.
- C. When contents of submitted literature from manufacturer includes data not pertinent to the submittal, clearly indicate which portion of the contents is being submitted for review.

1.4 SAMPLES

- A. Samples shall bear a tag or label providing the following information:
 - 1. Project name and location.
 - 2. Manufacturer, supplier.
 - 3. Name, finish, and composition of material.
 - 4. Location of where material is to be used.
 - 5. Specification Section number.
 - 6. Labels shall be large enough for acceptance stamp.

1.5 CERTIFICATES OF COMPLIANCE

- A. Where certificates of Compliance are specified, show on each certification the name and location of the work, name and address of Contractor, quantity and date or dates of shipment or delivery to which the certificate applies, and names of the manufacturer.
- B. Certification shall be in the form of a letter or company standard form. Certificates shall be signed by an officer of the manufacturer. In addition, all laboratory test reports submitted with Certificates shall show date of testing, specified requirements for which testing was performed, and results of tests.

1.6 JOB SITE DOCUMENTS

- A. Only accepted Submittals, Shop Drawings, Samples, and Product Data shall be kept at the job site by Contractor. Keep a complete set of such documents on file at the job site.

1.7 FIELD MEASUREMENTS

- A. Required field measurements are the responsibility of the Contractor.

PART 2 - PRODUCTS
(Not Used)

PART 3 - EXECUTION
(No Used)

END OF SECTION 01 33 00

SECTION 01 56 39 - TEMPORARY TREE AND PLANT PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. City of Raleigh Tree Manual - Arboricultural Specifications and Standards of Practice, latest edition.
- C. Project Tree Impact Permit

1.2 SUMMARY

- A. Section includes general protection and pruning of existing trees and plants that are affected by execution of the Work, whether temporary or permanent construction.
- B. A Tree Impact Permit is required for all City trees impacted in City right of way and City-owned or controlled property.
- C. Related Requirements:
 - 1. Section 015000 "Temporary Facilities and Controls" for temporary site fencing.
 - 2. City of Raleigh Tree Manual - Arboricultural Specifications and Standards of Practice, latest edition.
 - 3. Project Tree Impact Permit

1.3 DEFINITIONS

- A. Caliper: Diameter of a trunk measured by a diameter tape or the average of the smallest and largest diameters at a height 6 inches above the ground for trees up to and including 4-inch size at this height and as measured at a height of 12 inches above the ground for trees larger than 4-inch size.
- B. Caliper (DBH): Diameter breast height; diameter of a trunk as measured by a diameter tape or the average of the smallest and largest diameters at a height 54 inches above the ground line for trees with caliper of 8 inches or greater as measured at a height of 12 inches (300 mm) above the ground.
- C. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.
- D. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and indicated on Drawings and defined by a circle concentric with each tree with a radius 1.5 times the diameter of the drip line unless otherwise indicated.

- E. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to temporary tree and plant protection including, but not limited to, the following:
 - a. Coordination of Work and equipment movement with the locations of protection zones.
 - b. Field quality control.

1.5 FIELD CONDITIONS

- A. The following practices are prohibited within protection zones:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Moving or parking vehicles or equipment.
 - 3. Foot traffic.
 - 4. Erection of sheds or structures.
 - 5. Impoundment of water.
 - 6. Excavation or other digging unless otherwise indicated.
 - 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- B. Do not direct vehicle or equipment exhaust toward protection zones.
- C. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones and organic mulch.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Protection-Zone Fencing: Fencing fixed in position and meeting the following requirements shown on the Construction Plans
- B. Protection-Zone Signage: Shop-fabricated, rigid plastic or metal sheet with attachment holes prepunched and reinforced; legibly printed with nonfading lettering and as follows:

PART 3 - EXECUTION

3.1 TREE IMPACT PERMITTING

- A. Contractor shall acquire a Tree Impact Permit from the City of Raleigh Development Service, install all required tree protection fence per Plans, and successfully complete tree protection fence field inspection by City of Raleigh Urban Forestry prior to any further work commencing on Project site.

3.2 EXAMINATION

- A. Erosion and Sedimentation Control: Examine the site to verify that temporary erosion- and sedimentation- control measures are in place. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- B. Prepare written report, endorsed by a certified arborist, listing conditions detrimental to tree and plant protection.

3.3 PREPARATION

- A. Locate and clearly identify trees, shrubs, and other vegetation shown on plans for removal. Review all removals with Owner prior to removal.
- B. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.

3.4 PROTECTION ZONES

- A. Protection-Zone Fencing: Install protection-zone fencing along edges of protection zones before materials or equipment are brought on the site and construction operations begin in a manner that will prevent people and animals from easily entering protected areas except by entrance gates. Construct fencing so as not to obstruct safe passage or visibility at vehicle intersections where fencing is located adjacent to pedestrian walkways or in close proximity to street intersections, drives, or other vehicular circulation.
- B. Protection-Zone Signage: Install protection-zone signage in visibly prominent locations in a manner approved by Architect. Install one sign spaced approximately every 20 feet (6 m) on protection-zone fencing, but no fewer than four signs with each facing a different direction.
- C. Maintain protection zones free of weeds and trash.
- D. Maintain protection-zone fencing and signage in good condition as acceptable to Architect and remove when construction operations are complete and equipment has been removed from the site.
 - 1. Do not remove protection-zone fencing, even temporarily, to allow deliveries or equipment access through the protection zone.
 - 2. Temporary access is permitted subject to preapproval in writing by arborist if a root buffer effective against soil compaction is constructed as directed by arborist. Maintain root buffer

so long as access is permitted.

3.5 EXCAVATION

- A. General: Excavate at edge of protection zones and for trenches indicated within protection zones according to requirements in Section 312000 "Earth Moving" unless otherwise indicated.
- B. Trenching within Protection Zones: Where utility trenches are required within protection zones, excavate under or around tree roots by hand or with air spade, or tunnel under the roots by drilling, auger boring, or pipe jacking. Do not cut main lateral tree roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots as required for root pruning. If excavating by hand, use narrow-tinespading forks to comb soil and expose roots.
- C. Redirect roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking. If encountered immediately adjacent to location of new construction and redirection is not practical, cut roots approximately 3 inches (75 mm) back from new construction and as required for root pruning.
- D. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.

3.6 ROOT PRUNING

- A. Prune tree roots that are affected by temporary and permanent construction. Prune roots as follows:
 - 1. Cut roots manually by digging a trench and cutting exposed roots with sharp pruning instruments; do not break, tear, chop, or slant the cuts. Do not use a backhoe or other equipment that rips, tears, or pulls roots.
 - 2. Cut Ends: Do not paint cut root ends.
 - 3. Temporarily support and protect roots from damage until they are permanently redirected and covered with soil.
 - 4. Cover exposed roots with burlap and water regularly.
 - 5. Backfill as soon as possible according to requirements in Section 312000 "Earth Moving."
- B. Root Pruning at Edge of Protection Zone: Prune tree roots 12 inches outside of the protection zone by cleanly cutting all roots to the depth of the required excavation.
- C. Root Pruning within Protection Zone: Only as instructed by Owner, clear and excavate by hand or with air spade to the depth of the required excavation to minimize damage to tree root systems. If excavating by hand, use narrow-tine spading forks to comb soil to expose roots. Cleanly cut roots as close to excavation as possible.

3.7 REGRADING

- A. Lowering Grade: Where new finish grade is indicated below existing grade around trees, slope grade beyond the protection zone. Maintain existing grades within the protection zone.
- B. Lowering Grade within Protection Zone: Where new finish grade is indicated below existing grade

around trees, slope grade away from trees as recommended by arborist unless otherwise indicated.

1. Root Pruning: Prune tree roots exposed by lowering the grade. Do not cut main lateral roots ortaproots; cut only smaller roots. Cut roots as required for root pruning.

C. Raising Grade: Where new finish grade is indicated above existing grade around trees, slope grade beyond the protection zone. Maintain existing grades within the protection zone.

D. Minor Fill within Protection Zone: Where existing grade is 2 inches (50 mm) or less below elevation offinish grade, fill with backfill soil. Place backfill soil in a single uncompacted layer and hand grade to required finish elevations.

3.8 FIELD QUALITY CONTROL

A. Inspections: Engage a qualified arborist to direct plant-protection measures in the vicinity of trees, shrubs, and other vegetation indicated to remain and to prepare inspection reports.

3.9 REPAIR AND REPLACEMENT

A. General: Repair or replace trees, shrubs, and other vegetation indicated to remain or to be relocated that are damaged by construction operations, in a manner approved by Architect.

1. Submit details of proposed pruning and repairs. Perform repairs of damaged trunks, branches, and roots within 24 hours according to arborist'swritten instructions.

2. Replace trees and other plants that cannot be repaired and restored to full-growth status, as determined by Owner.

B. Trees: Remove and replace trees indicated to remain that are more than 25 percent dead or in an unhealthy condition before the end of the corrections period or are damaged during construction operations that Architect determines are incapable of restoring to normal growth pattern.

1. Small Trees: Provide new trees of same size and species as those being replaced for each treethat measures 6 inches (150 mm) or smaller in caliper size.

2. Large Trees: Provide two new tree(s) of 6-inch (150-mm) caliper size for each tree being replacedthat measures more than 6 inches (150 mm) in caliper size.

a. Species: As selected by Owner.

3. Plant and maintain new trees as specified in Section 329300 "Plants."

C. Excess Mulch: Rake mulched area within protection zones, being careful not to injure roots. Rake to loosen and remove mulch that exceeds a 2-inch (50-mm) uniform thickness to remain.

3.10 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove excess excavated material, displaced trees, trash, and debris and legally dispose of them off Owner's property.

END OF SECTION 01 56 39

SECTION 01 76 00 – PROTECTION OF INSTALLED CONSTRUCTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This Section includes information for the protection of all construction and products, including City provided products after installation.
- B. Protection of Existing Utilities.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.3 PROTECTION OF ALL INSTALLED CONSTRUCTION AND EXISTING FACILITIES

- A. Existing Utilities:
 - 1) Known existing utilities are shown on Contract Drawings in approximate locations as based upon best available as-built information, records and utility locate information.
 - 2) Contractor shall exercise care in avoiding damage to all existing utilities during construction and any demolition activities. Contractor shall be responsible for repair of same if damaged through Contractor's action. Hand excavation shall be utilized when digging in close proximity to existing utilities.
 - 3) Electrical Equipment: Any work performed on energized electrical equipment must be coordinated through and scheduled with City's Representative and utility provider. The City reserves right to specify specific conditions for all work involving energized high voltage electrical equipment and its scheduled modification proposal.
- B. During all work activities, including selective demolition, storage, handling, installation, protect construction in progress and installed structures, furnishings, pavements, equipment, and materials including any adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration until completion and Final Acceptance by the Owner.
- C. All existing improvements and facilities shall be protected from damage of any type resulting from operations, equipment, or workers of Contractor during the construction process.
- D. Lawns and Landscaping: Restrict traffic of any kind across planted lawn and landscaped areas.
- E. Exterior Work: Protect all exterior work including paving, landscaping, walkways, and structures.
- F. Damaged Work: Repair or replace all damaged work promptly as directed by Owner or City's Representative.
- G. Damaged Utilities: Where existing utilities are damaged or disrupted by any act, omission, neglect, or misconduct on the part of the Contractor in the manner or method of executing the Work, or due to non-execution of work, such damage shall be immediately repaired to maintain operation regardless of the time of occurrence.

- H. Protective Coatings: Remove protective coatings, coverings, etc. during final project cleaning and prior to Final Acceptance

PART 2 – PRODUCTS
(NOT USED)

PART 3 – EXECUTION
(NOT USED)

END OF SECTION 01 76 00

SECTION 017700 – CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.

1.3 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.4 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest control inspection.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction

- photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Owner's signature for receipt of submittals.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 2. Complete final cleaning requirements, including touchup painting.
 3. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Owner, that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 2. Results of completed inspection will form the basis of requirements for final completion.
- 1.7 FINAL COMPLETION PROCEDURES
- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
1. Certified List of Incomplete Items: Submit certified copy of Owner's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Owner. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 2. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 3. Submit pest-control final inspection report.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.8 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - 1. Organize list of spaces in sequential order, starting with exterior areas first.
 - 2. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Owner.
 - d. Name of Contractor.
 - e. Page number.
 - 3. Submit list of incomplete items in the following format:
 - a. PDF electronic file. Owner will return annotated file.

1.9 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Owner for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
 - 1. Bind warranties and bonds into PDF electronic files.
- C. Provide operation and maintenance manuals in PDF electronic files.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:

- a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
- b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
- c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
- d. Remove tools, construction equipment, machinery, and surplus material from Project site.
- e. Remove snow and ice to provide safe access to site.
- f. Remove labels that are not permanent.
- g. Leave Project clean and ready for occupancy.

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
- C. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
- D. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
- E. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.

END OF SECTION 01 77 00

SECTION 017836 - WARRANTIES

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. Refer to Project General and Supplemental Conditions.
- B. This section covers warranty work that includes all improvements in the contract. The Contractor shall supply all labor, materials, and equipment necessary to warrant all work as specified herein.
- C. Per Project Contract and General Conditions, all areas improved as a part of this contract shall be warranted for a period of one (1) year following the date of Final Acceptance.**
- D. Warranty work includes the repair or replacement of all materials or related work for a period of one year after Final Acceptance at no additional cost to the City.
- E. All Manufacturer's Warranties shall not be included in this one-year timetable and shall still operate exclusive of this Section.
- F. All work during the warranty period shall be subject to observation by the City.
 - 1. The Contractor shall be notified in writing of any workmanship or materials deemed by the to be faulty or not satisfactory.
 - 2. The Contractor shall respond in writing to the City within three (3) working days of receipt of the written notice.
 - 3. The Contractor shall repair and/or replace any such deficiencies within ten (10) working days, or less if notified in writing by Owner to do so, of receipt of notice by the Owner unless otherwise authorized by the Owner. The Contractor shall notify the City in writing when the problems have been corrected.
 - 4. The Contractor shall notify the City upon completion of remedial work for reinspection.
 - 5. The Contractor shall not be issued release of warranty period until all work performed by Contractor is completed in accordance to Contract.

PART 2 - PRODUCTS
(Not Used)

PART 3 - EXECUTION
(Not Used)

END OF SECTION 01 78 36

SECTION 32 13 13 - CONCRETE PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes exterior cement concrete pavement for the following:
 - 1. Concrete pad.
- B. Related Sections include the following:
 - 1. Division 32 Section "Concrete Paving Joint Sealants" for joint sealants of joints in concrete pavement and at isolation joints of concrete pavement with adjacent construction.

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, and ground granulated blast- furnace slag.

1.4 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixtures: For each concrete pavement mixture. Include alternate mixture designs when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
- C. Qualification Data: For manufacturer and testing agency.
- D. Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated, based on comprehensive testing of current materials:
- E. Aggregates. Include service record data indicating absence of deleterious expansion of concrete due to alkali-aggregate reactivity.
- F. Material Certificates: Signed by manufacturers certifying that each of the following materials complies with requirements:
 - 1. Cementitious materials.
 - 2. Steel reinforcement and reinforcement accessories.
 - 3. Admixtures.
 - 4. Curing compounds.
 - 5. Applied finish materials.
 - 6. Bonding agent or epoxy adhesive.
 - 7. Joint fillers.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products who complies with ASTM C 94/C 94M requirements for production facilities and equipment.
- B. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- C. Testing Agency Qualifications: An independent agency qualified according to ASTM C 1077 and ASTM E 329 for testing indicated, as documented according to ASTM E 548.
- D. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-01 or an equivalent certification program.
- E. ACI Publications: Comply with ACI 301, "Specification for Structural Concrete," unless modified by requirements in the Contract Documents.
- F. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.

1.6 PROJECT CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

PART 2 - PRODUCTS

2.1 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.
 - 1. Use flexible or curved forms for curves with a radius 100 feet (30.5 m) or less.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

- A. Joint Dowel Bars: Plain steel bars, ASTM A 615/A 615M, Grade 60 (Grade 420). Cut bars true to length with ends square and free of burrs.
- B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete, and as follows:
 - 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.
 - 2. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.

2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout the Project:
 - 1. Portland Cement: ASTM C 150, Type I, white.
- B. Normal-Weight Aggregates: ASTM C 33, Class 4S coarse aggregate, uniformly graded. Provide aggregates from a single source with documented service record data of at least 10 years' satisfactory service in similar pavement applications and service conditions using similar aggregates and cementitious materials.
 - 1. Maximum Coarse-Aggregate Size: 1 inch nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: ASTM C 94/C 94M.
- D. Air-Entraining Admixture: ASTM C 260.
- E. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.
 - 1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
 - 2. Retarding Admixture: ASTM C 494/C 494M, Type B.
 - 3. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

2.4 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Evaporation Retarder: Waterborne, monomolecular film forming; manufactured for application to fresh concrete.
 - 1. Available Products:
 - a. Axim Concrete Technologies; Cimfilm.
 - b. Burke by Edeco; BurkeFilm.
 - c. ChemMasters; Spray-Film.
 - d. Conspec Marketing & Manufacturing Co., Inc.; Aquafilm.
 - e. Dayton Superior Corporation; Sure Film.
 - f. Euclid Chemical Company (The); Eucobar.
 - g. Kaufman Products, Inc.; Vapor Aid.
 - h. Lambert Corporation; Lambco Skin.
 - i. L&M Construction Chemicals, Inc.; E-Con.
 - j. MBT Protection and Repair, ChemRex Inc.; Confilm.
 - k. Meadows, W. R., Inc.; Sealtight Evapre.
 - l. Metalcrete Industries; Waterhold.

- m. Nox-Crete Products Group, Kinsman Corporation; Monofilm.
- n. Sika Corporation, Inc.; SikaFilm.
- o. Symons Corporation; Finishing Aid.
- p. Vexcon Chemicals, Inc.; Certi-Vex EnvioAssist.

2.5 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.
- B. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

2.6 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete determined by either laboratory trial mixes or field experience.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed concrete mixture designs for the trial batch method.
- B. Proportion mixtures to provide normal-weight concrete with the following properties:
 - 1. Compressive Strength (28 Days): 3000 psi (20.7 MPa).
 - 2. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.45.
 - 3. Slump Limit: 5 inches
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
 - 1. Air Content: 4-1/2 percent plus or minus 1.5 percent for 1-inch nominal maximum aggregate size.
- D. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.
- E. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.
 - 1. Use plasticizing and retarding admixture in concrete, as required, for placement and workability.
 - 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
- F. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals as follows:
 - 1. Fly Ash or Pozzolan: 25 percent.

2.7 MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M and ASTM C 1116. Furnish batch certificates for each batch discharged and used in the Work.

1. When air temperature is between 85 deg F (30 deg C) and 90 deg F (32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.
- B. Proceed with concrete pavement operations only after nonconforming conditions have been corrected and subgrade is ready to receive pavement.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Zinc-Coated Reinforcement: Use galvanized steel wire ties to fasten zinc-coated reinforcement. Repair cut and damaged zinc coatings with zinc repair material.

3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.
- B. When joining existing pavement, place transverse joints to align with previously placed joints, unless otherwise indicated.
- C. Construction Joints: Set construction joints at side and end terminations of pavement and at

locations where pavement operations are stopped for more than one-half hour unless pavement terminates at isolation joints.

1. Continue steel reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of pavement strips, unless otherwise indicated.
2. Provide tie bars at sides of pavement strips where indicated.
3. Butt Joints: Use bonding agent at joint locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
4. Keyed Joints: Provide preformed keyway-section forms or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
5. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt-coat one-half of dowel length to prevent concrete bonding to one side of joint.
6. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.
7. Locate expansion joints at intervals of 30 feet, unless otherwise indicated.
8. Extend joint fillers full width and depth of joint.
9. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
10. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
11. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
12. Protect top edge of joint filler during concrete placement with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.

3.6 Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows to match jointing of existing adjacent concrete pavement:

1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover marks on concrete surfaces.
2. Doweled Contraction Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt coat one-half of dowel length to prevent concrete bonding to one side of joint.

B. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to a 1/4-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.

3.7 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. Remove snow, ice, or frost from subbase surface and reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not

place concrete around manholes or other structures until they are at required finish elevation and alignment.

- D. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- E. Do not add water to concrete during delivery or at Project site.
- F. Do not add water to fresh concrete after testing.
- G. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- H. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
- I. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.
- J. Place concrete in two operations; strike off initial pour for entire width of placement and to the required depth below finish surface. Lay welded wire fabric or fabricated bar mats immediately in final position. Place top layer of concrete, strike off, and screed.
- K. Remove and replace concrete that has been placed for more than 15 minutes without being covered by top layer or use bonding agent if approved by Owner.
- L. Screed pavement surfaces with a straightedge and strike off.
- M. Commence initial floating using bull floats or darbies to impart an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.
- N. Curbs and Gutters: Produce curbs and gutters to required cross section, lines, grades, finish, and jointing as specified for formed concrete. If results are not approved, remove and replace with formed concrete.
- O. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 - 1. When air temperature has fallen to or is expected to fall below 40 deg F (4.4 deg C), uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F (10 deg C) and not more than 80 deg F (27 deg C) at point of placement.
 - 2. Do not use frozen materials or materials containing ice or snow.
 - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mix designs.
- P. Hot-Weather Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
 - 1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F (32 deg

- C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.8 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
- C. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with a stiff- bristled broom, perpendicular to line of traffic.

3.9 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
- F. Moist Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 1. Water.
 2. Continuous water-fog spray.
 3. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
- G. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture- retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.

- H. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.10 PAVEMENT TOLERANCES

- A. Comply with tolerances of ACI 117 and as follows:
 - 1. Elevation: 1/4 inch.
 - 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 - 3. Surface: Gap below 10-foot-long, unlevelled straightedge not to exceed 1/4 inch.
 - 4. Lateral Alignment and Spacing of Tie Bars and Dowels: 1 inch.
 - 5. Vertical Alignment of Tie Bars and Dowels: 1/4 inch.
 - 6. Alignment of Tie-Bar End Relative to Line Perpendicular to Pavement Edge: 1/2 inch.
 - 7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Pavement Edge: Length of dowel 1/4 inch per 12 inches.
 - 8. Joint Spacing: 3 inches.
 - 9. Contraction Joint Depth: Plus 1/4 inch, no minus.
 - 10. Joint Width: Plus 1/8 inch, no minus.

3.11 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
- C. Testing Frequency: Obtain at least 1 composite sample for each 100 cu. yd. or fraction thereof of each concrete mix placed each day.
- D. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 - 1. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mix. Perform additional tests when concrete consistency appears to change.
 - 2. Air Content: ASTM C 231, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mix.
 - 3. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F (4.4 deg C) and below and when 80 deg F (27 deg C) and above, and one test for each composite sample.
 - 4. Compression Test Specimens: ASTM C 31/C 31M; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
 - 5. Compressive-Strength Tests: ASTM C 39/C 39M; test 1 specimen at 7 days and 2 specimens at 28 days.
- E. A compressive-strength test shall be the average compressive strength from 2 specimens obtained from same composite sample and tested at 28 days.
- F. Strength of each concrete mix will be satisfactory if average of any 3 consecutive compressive-

strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi (3.4 MPa).

- G. Test results shall be reported in writing to Owner, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- H. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Owner but will not be used as sole basis for approval or rejection of concrete.
- I. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Owner.
- J. Remove and replace concrete pavement where test results indicate that it does not comply with specified requirements.
- K. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.12 REPAIRS AND PROTECTION

- A. Remove and replace concrete pavement that is broken, damaged, or defective or that does not comply with requirements in this Section.
- B. Drill test cores, where directed by Owner, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with portland cement concrete bonded to pavement with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 32 13 13

SECTION 32 31 16 - WELDED WIRE FENCE AND GATES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including Division 01 - General Requirements, apply to this Section.

1.2 SUMMARY

A. This Section includes furnishing all labor, materials, equipment, and services for the complete installation of welded wire fences and gates, including but not limited to:

1. Welded wire fence panels with tube steel frames.
2. Welded wire gates with tube steel frames.
3. Posts, rails, fittings, hardware, and accessories.
4. Grout and sealant for post installation.
5. Surface coatings (galvanizing and powder coating).
6. Touch-up and repair.

B. Related Sections: 1. Section 03 30 00 - Cast-in-Place Concrete: For concrete foundations, curbs, or other concrete elements where fence posts are set.

2. Section 05 50 00 - Metal Fabrications: For any custom metal elements not typically part of standard fence systems but integrated with the fence.

3. Section 01 33 00 - Submittal Procedures: For general submittal requirements.

4. Section 01 77 00 - Closeout Procedures: For warranty and closeout requirements.

1.3 REFERENCES

A. Standards: Unless otherwise indicated, comply with the applicable provisions and recommendations of the latest edition of the following standards:

1. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.

2. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.

3. ASTM A185/A185M - Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete. (Note: While primarily for concrete reinforcement, it covers welded wire fabric properties. Consider also ASTM A884/A884M or specific fence fabric standards if available for your exact product.)

4. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.

5. ASTM A641/A641M - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.

6. ASTM A780/A780M - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.

7. ASTM F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.

8. Powder Coating Institute (PCI) standards and recommendations.

1.4 SUBMITTALS

A. All submittals shall be in accordance with the requirements of the General Conditions, and Division 01 - General Requirements.

B. Shop Drawings: Submit shop drawings prior to manufacture. Shop drawings shall include, but not be limited to:

1. Layout and dimensions of all fence and gate components.
2. Dimensions and sections of posts, rails, and panels.
3. Details of fabrication, connections, and anchorage.
4. Details of gate frames, hardware, and operation.
5. Foundation requirements and dimensions.
6. Locations of all accessories.
7. Schedules for fence types, gate types, and hardware.

C. Product Data: Submit manufacturer's technical data sheets for:

1. Steel pipe, bars, and wire mesh.
2. Galvanizing process and materials.
3. Powder coating materials (TGIC-Polyester and PVC) including manufacturer's application instructions, cured film thickness, and adhesion test results.
4. Hinges, latches, lock bolts, and other gate hardware.
5. Padlocks.
6. Non-shrink grout.
7. Polyurethane sealant.
8. Organic zinc repair paint.

D. Samples: The Contractor shall submit for approval finished samples of parts of the fences. The workmanship and finish of the final product shall be equal to the approved samples.

1. Only if proposed manufacturer is other than as specified, a full-size sample must be submitted for approval for the following: Gate latch for single gate, padlock.

2. Samples of powder coating colors for approval.

E. Quality Assurance / Quality Control Submittals:

1. Manufacturer's certifications for powder coating materials and application process.

2. Manufacturer's certifications for galvanizing process.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Companies regularly engaged in the manufacture of welded wire fence and gate systems of the types and sizes required, whose products have been in satisfactory use for not less than five (5) years.

B. Installer Qualifications: Engage an installer experienced in installation of welded wire fence systems of the type and complexity required for this Project.

C. Pre-Installation Conference: Conduct a pre-installation conference to review methods and procedures related to welded wire fence installation, including coordination with other work.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver fence materials to Project site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Store fence materials in a manner to prevent damage, discoloration, and theft. Protect from weather and direct sunlight. C. Handle fence components to prevent bending, twisting, or damage to finishes.

1.7 PROJECT CONDITIONS

A. Field Measurements: Verify actual dimensions of construction contiguous with welded wire fence and gates by field measurements before fabrication. Coordinate fabrication and delivery to ensure no delay in progress of work.

1.8 WARRANTY

A. Provide manufacturer's standard warranty for fence system and coatings against defects in materials and workmanship.

PART 2 - PRODUCTS

2.1 FENCE AND GATE MATERIALS - GENERAL

A. FENCES AND GATES shall be constructed of solid bars, posts, and rails of the sizes shown on the plans. All material shall conform to Specification ASTM A36.

2.2 FABRICATION - STEEL FENCES AND GATES

- A. Fences and Gates shall be fabricated in strict accordance with the plans and approved Shop Drawings.
- B. Posts and rails shall be formed into panels of the shapes on the plans and joints completely welded with welds of proper size and shape; all welds ground smooth to a neat finish.
- C. Connection shall be provided as indicated on the plans.

2.3 POSTS AND RAILS

- A. Posts and rails shall be standard weight galvanized steel pipe of the sizes shown on the plans and conform to ASTM Serial Designation F-1083 Schedule 40.
- B. Posts and Rails shall be hot dip galvanized inside and outside in accordance with ASTM Serial Designation F-1083.
- C. Posts and pickets shall, in all cases, be truly vertical. Rails and bars shall be parallel to grade as shown on the plans.

2.4 FABRIC (MESH)

- A. Fabric shall be hot dip galvanized steel wire mesh as per ASTM A641, with a thermally fused polyvinyl chloride powder coating of 7 to 12 mils thick.
- B. Color to match framework.
- C. Fabric shall be produced by methods recognized as good commercial practices.
- D. Core wire tensile strength shall be 75,000 psi.
- E. Wire used for the manufacture of fabric shall be capable of being woven into fabric without the PVC coating cracking or peeling.
- F. PVC coating shall be a dense, impervious covering free of voids. Excessive roughness, bubbles, blisters, bruises and flaking will be a basis for rejection.
- G. PVC shall be thermally fused. Bonded or extruded and glued surface coating will not be permitted.

2.5 SURFACE COATINGS

- A. General: All posts, rails and fittings shall be powder coated with either polyvinyl chloride (PVC) or TGIC-Polyester. Galvanizing of all components shall provide an acceptable substrate for applied powder coatings. No lacquer, urethane, or other coatings which would prevent proper adhesion of powder coating shall be applied to the fence elements.
- B. Application: The powder coating shall be applied to the galvanized surfaces in such a manner that the coating will not peel off. Insure surfaces to be coated are clean and dry and free of grease, dust, rust, etc. All galvanized parts, prior to powder coating, shall first receive phosphating and chromating treatments to improve the adhesion of the surface coating. Color to be black.

C. The entire fence installation shall be coated with one of the two following types of powder coating:

1. TYPE A (Frames): TGIC-Polyester Powder Coating:

a. TGIC-Polyester Powder shall be applied to the galvanized steel in such a manner that the coating will not peel off.

b. The TGIC-Polyester shall be applied at a film thickness of 3 to 6 mils by electrostatic spray process and bake finished per manufacturer's directions.

c. The TGIC-Polyester shall be applied without voids, tears, or cuts that reveal the substrate and shall thoroughly adhere to the metal without peeling when scratched with a pick device or knife blade point.

2. TYPE B (Mesh): Polyvinyl Chloride Powder Coating:

a. PVC Powder coating shall be applied to the galvanized steel by the fluid bed method to a preheated base which has been cleaned and primed prior to the submersion in vinyl, resulting in a firm bond between the PVC and the metal.

b. PVC shall be applied to a film thickness of 10 to 15 mils on framework and fittings, and 7 to 12 mils on fabric without voids, tears, cuts that reveal the substrate and shall thoroughly adhere to the metal without peeling when scratched with a pick device or knife blade point.

2.6 GATE HARDWARE

A. Hinges: Stanley #BB855, Heavy Duty Steel Ball Bearing Hinge, 5" x 6", as manufactured by Stanley Hardware, New Britain, CT, Shannon Gates and Railings, Deer Park NY or approved equal.

B. Lock Bolt - Double Gates:

1. Shall be a drop rod bar arranged to engage the gate stop. Locking device shall be constructed so that the drop rod cannot be raised when the gate is locked.

2. The locking bolt and bolt catch hardware shall be constructed as shown on the standard detail drawings.

3. The locking device shall have provisions for a padlock. All necessary fittings and gate holders to lock gates in both open and closed positions shall be furnished.

4. The locking device shall be as manufactured by Shannon Gates and Railings, Deer Park NY, or an approved equal locking device.

C. Gate Latch – Single Gates:

1. Shall be a lockable stirrup type. Latch shall be constructed of steel bars and blocks with a stainless steel pin, as shown on the drawings.

2. The ends of stirrups shall be treated with a heavy-duty flexible, rubberized coating such as Plastidip as manufactured by P.D.I. Inc., Circle Pines, MN, or approved equal.

D. Padlock:

1. The Contractor shall furnish one padlock for each single gate and each leaf of double gates.
2. The padlocks shall be American No. 5571 as manufactured by American Lock Co., Crete, IL., or approved equal.
3. All padlocks for the same park facility shall be keyed alike, with two inch (2") wide by three-quarter inch (3/4") thick brass body, maximum security, five (5) pin tumblers with hardened alloy steel chrome plated shackle no less than three-eighth inch (3/8") diameter and two inch (2") clearance (elongated shackle).
4. A galvanized steel chain, nine inches (9") long shall be fastened to the gate and body of the lock. The chain shall be five-sixteenths inch (5/16") by one and three-eighths inch (1 3/8").
5. The Contractor shall furnish two (2) keys for each padlock.

2.7 GROUT AND SEALANT

- A. Grout: Non-shrink, cement based grout such as Sonneborn 10K Grout as manufactured by BASF Building Systems, Shakopee, MN or SikaGrout 212, as manufactured by Sika Corporation, Lyndhurst, NJ, or approved equal. Note: All gypsum (Calcium Sulfate, CaSO₄) based grout will be rejected.
- B. Sealant: One part polyurethane, elastomeric adhesive such as Sonneborn's Ultra Sealant, as manufactured by BASF Building Systems, Shakopee, MN or Sikaflex-1a, as manufactured by Sika Corporation, Lyndhurst, NJ, or approved equal.

2.8 ACCESSORIES

- A. Fasteners: Corrosion-resistant, tamper-resistant as required.
- B. Touch-Up Materials:
1. Organic zinc repair paint complying with ASTM A780, with 65 percent zinc by weight. Thickness of repair shall not be less than required by ASTM A123.
 2. Powder coating touch-up material matching factory-applied finish, as recommended by the powder coating manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions where welded wire fences and gates are to be installed.
- B. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Install fences and gates in accordance with manufacturer's written instructions, approved shop drawings, and as specified herein.

B. Post Installation:

1. The fences shall be erected in holes that have been formed in the concrete or stone to receive them.
2. After the posts have been set in place and properly supported to hold them in line and grade, the annular space shall be filled with the specified non-shrink, cementitious grout.
3. The grout shall be flush with the concrete curb.
4. After the grout has cured, the Contractor is to install polyurethane sealant around the fence post. Sealant shall be gunned in between the base of the fence post and the concrete curb. Sealant shall be applied in strict accordance with the manufacturer's instructions, and shall be tooled in as required.

C. Fence Fabric Installation: Fabric shall be stretched to provide a smooth, taut, uniform appearance free from sag.

D. Gate Installation: Install gates plumb, level, and true to line with proper clearances for smooth and easy operation. Adjust gate hardware for proper function.

E. Alignment: Any fences and gates not set plumb and true to line and grade shall be removed and replaced at the Contractor's expense.

3.3 TOUCH-UP AND REPAIR

A. For minor damage caused by installation, transportation, field welding and cutting of metal powder coated surfaces:

1. On welded and cut surfaces, clean welds, bolted connections, abraded or sawcut areas, then apply organic zinc repair paint complying with ASTM A780. Galvanizing repair paint shall have 65 percent zinc by weight. Thickness of repair shall not be less than required by ASTM A123. Then repair powder coating per item 2 below.
2. On damaged powder coated surfaces, touch-up finish in conformance with manufacturer's recommendations. Provide touch-up such that repair is not visible from a distance of six feet (6').

3.4 CLEANING

A. Upon completion of fence and gate installation, remove all debris, excess materials, and equipment from the site.

B. Clean all exposed surfaces of fences and gates, removing any dirt, dust, or other foreign matter.

3.5 PROTECTION

- A. Protect installed fences and gates from damage during remainder of construction period.
- B. The Contractor shall maintain the fences and gates during the life of the contract and shall repair or replace all members that are disturbed, damaged, or destroyed.

END OF SECTION 32 31 16

