



CITY OF **FALLS**  
**CHURCH**

**IFB #**

**ATTACHMENT**

**GENERAL PROVISIONS  
CONSTRUCTION PROJECTS**

**DEPARTMENT OF PUBLIC WORKS  
CITY OF FALLS CHURCH**

November 2015

GENERAL PROVISIONS ▪ CONSTRUCTION PROJECTS

CITY OF FALLS CHURCH  
DEPARTMENT OF PUBLIC WORKS

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## GENERAL PROVISIONS ▪ CONSTRUCTION PROJECTS

CITY OF FALLS CHURCH  
DEPARTMENT OF PUBLIC WORKS

## A. DEFINITIONS

- **Agreement:** The complete written and signed Contract document.
- **Award Date:** Date of execution of the Contract Agreement by the Purchasing Agent (or the City Manager, when so required).
- **Business Day:** Any day that the City is open for general business.
- **Calendar Day:** Any day of twenty-four (24) hours measured from midnight to the next midnight. Weekends and holidays are included. When the term “Day” is used it shall be assumed to refer to a Calendar Day unless otherwise specified.
- **Change in Work:** Work or materials clearly not covered in the Contract; or an adjustment to the extent of the Work ordered or authorized by the Project Manager and not specifically included in the contract.
- **Change Order:** A written order to the Contractor, signed by both the City and the Contractor, which authorizes a Change in Work and/or an adjustment to the Cost of the Contract and/or Purchase Order and/or the Time of Completion.
- **Change Order, Unilateral:** A Change Order issued by the City which directs a change in the Work and specifies the amount of compensation and/or time due the Contractor, if any. The Contractor is obligated to perform the change.
- **City:** The City of Falls Church, Virginia as party to the Contract.
- **Commencement Date:** The date on which the Time of Completion period will commence for the Contractor to perform the Work; the Commencement Date is provided in the Notice to Proceed (NTP).
- **Completion Date, Scheduled:** The Scheduled Completion Date for the Work shall be as determined in Contract Documents and/or as specified in consecutive calendar days from the Commencement Date listed on the NTP. Subject to modifications made by Change Order.
- **Contract Documents:** The Agreement, all of the solicitation documents, and all the documents, Addenda, Attachments and Exhibits identified therein. This includes all Plans, Drawings and Specifications for the Work and all modifications thereto incorporated in the Contract.
- **Contract Drawings:** All drawings and construction notes which show the locations, character, dimensions, and details of the Work.
- **Contractor:** Party to the Contract with the City.
- **Critical Path:** The path through a series of activities, taking into account interdependencies, in which the late completion of activities will have an impact on the project end date or delay a key milestone. Activities that lie along the critical path cannot be delayed without delaying the finish time for the Work.
- **DPW:** The City of Falls Church Department of Public Works.

- **Final Acceptance:** The date on which the City issues a written Certificate of Completion & Final Acceptance (after Final Completion of the Work, Final Inspection, acceptance of any outstanding work, and receipt of final documentation).
- **Final Completion:** The condition when the City agrees that all the Work has been fully completed in accordance with the Contract Documents, and is acceptable. The City determines whether Final Completion has been accomplished after its representatives conduct Final Inspection of the Work.
- **Final Inspection:** Inspection conducted by the City and/or its Inspector(s) and/or VDOT after notification from the Contractor that the Work has reached Final Completion.
- **Float:** The difference between when an activity can start and must start so as to complete the Work by the scheduled Completion Date.
- **Force Majeure:** Unexpected or uncontrollable events (including those caused by nature) that can impact contract price, terms and/or conditions. Acts of God or disruptive conditions for which neither the City nor the Contractor will be held responsible; these events are not due to Contractor negligence.
- **Furnishings:** Ancillary or complementary appurtenances such as litter and recycling receptacles, bike racks or other items which are considered part of the completed project.
- **General Provisions:** The provisions and specifications contained in this document, applicable to City Contracts managed by DPW.
- **Inspector:** Person authorized by the City to inspect materials, collect materials tickets and related documentation, and inspect the progress of the Work. The Project Inspector may be either a City employee or a consultant hired by the City.
- **Long Lead Items:** Those products, system, components of a system, or piece of equipment having a delivery time long enough to directly affect the overall completion time of the project.
- **Notice to Proceed (NTP):** A written notice given by the City to the Contractor, specifying the Commencement Date and Time of Completion (typically in number of calendar days).
- **Owner:** The public body with whom the Contractor has entered into a contractual agreement and for whom the Work or services is to be provided, in this case, the City of Falls Church.
- **Project:** The term sometimes used instead of the specific or proper assigned title of the entire undertaking which includes, but is not limited to, the "Work" described by the Contract Documents.
- **Project Manager:** The Director of DPW or the person assigned by the Director as responsible for the oversight and management of the Work. If not otherwise defined, "Engineer" shall mean Project Manager.
- **Proposed Change Order (PCO):** Proposed change in contract amount, requirements, or time which becomes a change order when approved by the City. Also known as change order request.
- **Punchlist:** A list of items to be completed or corrected by the Contractor, typically at the time of Substantial Completion and prior to Final Acceptance by the City. The Punch list is prepared by the City in accordance with contract documents.
- **Specifications:** General Provisions, Special Provisions, Technical Specifications, Supplementary Specifications, and all written agreements and instructions pertaining to the performance of the Work. That part of the Contract Documents containing the written administrative requirements and the technical descriptions of materials, equipment,

construction systems, standards, and workmanship which describe the proposed Work in detail and provide information for the Contractor to perform the Work.

- **Special Provisions:** Written statements modifying or supplementing the General Provisions for this specific Scope of Work.
- **Subcontractor:** Those who have a direct contract with the prime Contractor or other Subcontractor to perform Work or furnish materials worked to a special design according to the Contract Documents. However, the term shall not include those who merely furnish material not so worked.
- **Submittal:** Any data required by the Contract Documents to be submitted to the Project Manager at any point prior to continuing Work. By way of illustration, Submittals would include, but not be limited to: construction schedules, shop drawings, equipment specifications, material samples, subcontractor utilization lists or supplier lists.
- **Substantial Completion:** is the date on which the Work, or an agreed upon portion of the Work, is sufficiently complete in accordance with the Contract Documents so that the City can occupy and use the Project (or a portion thereof) for its intended purposes. It is intended that, as of Substantial Completion, City staff and the public will have full and unrestricted use and benefit of the Work (or, if applicable, an agreed upon portion of the Work), from both an operational and safety standpoint, with only minor incidental Work remaining to be performed, corrected or repaired.
- **Supplementary Specifications:** Any specifications included or referenced in the Contract Documents which modify, nullify, or add to the Technical Specifications for requirements or conditions peculiar to the Project.
- **Technical Specifications:** The project-specific applicable technical specifications as published and as may be amended for the specific Work.
- **Time of Completion:** The period of time during which all Work shall be performed, in consecutive calendar days from the Commencement Date listed on the NTP until the Scheduled Date of Completion. Sometimes referred to as "Time for Completion."
- **Work:** All of the services performed under this Contract, or per individual Task (for contracts so configured) including, but not limited to, furnishing labor and supervision; furnishing and installing materials and equipment required to complete the Project as specified in the Contract Documents.

## B. GENERAL SCOPE OF WORK

The Contractor will furnish all labor, supervision, materials, tools, equipment, resources, administration, coordination, transportation, superintendence, falsework, water, water haulage, light, power, temporary construction of all kinds, and other services and facilities of every nature whatsoever that are necessary to execute the Work as described and required in the Contract Documents.

A specific Scope of Work and additional requirements are described in the Special Provisions for this project.

The Contractor is obligated to obtain clarification from the City's Project Manager concerning any questions about or conflicts in the Contract Documents in a timely way, so as not to delay the progress of the Work.

The Contract Documents set forth the minimum requirements expected by the City and the Contractor as necessary to complete the Work. Said Work shall be delivered to the City complete and usable within the scope of the Contract, with all parts in working order, and all connections properly made.

## C. CRITERIA

### 1. STANDARDS & SPECIFICATIONS

The Work shall be performed in full compliance with the following documents, read together as a single specification:

- The Construction Plans and Drawings for the Work;
- City of Falls Church Special Provisions relevant to the Work;
- City of Falls Church Supplementary Specifications relevant to the Work;
- City of Falls Church Tree & Landscape Specifications, current edition;
- City of Falls Church Standard Details, current edition(s), including those which may be published in its *Public Facilities Manual*;
- Virginia Department of Transportation (VDOT) *Road and Bridge Specifications*, most current edition; <http://www.virginiadot.org/business/const/spec-default.asp> and subsequent revisions, including Special Provision Copied Notes (SPCSs)
- VDOT *Road & Bridge Standards*, most current edition;  
[http://www.virginiadot.org/business/locdes/2008\\_road\\_and\\_bridge\\_standards\\_table\\_of\\_contents.asp](http://www.virginiadot.org/business/locdes/2008_road_and_bridge_standards_table_of_contents.asp)
- VDOT Location & Design Division Instructional and Informational Memoranda;  
<http://www.virginiadot.org/business/locdes/rd-ii-memoranda-index.asp>
- Virginia *Work Area Protection Manual*, dated 2011 or as updated,  
[http://www.virginiadot.org/business/resources/wztc/Virginia\\_WAPM\\_2011\\_web.pdf](http://www.virginiadot.org/business/resources/wztc/Virginia_WAPM_2011_web.pdf)
- Manual on Uniform Traffic Control Devices (MUTCD) current addition, including the Virginia supplement,  
[http://www.virginiadot.org/business/virginia\\_mutcd\\_supplement.asp](http://www.virginiadot.org/business/virginia_mutcd_supplement.asp)
- FHWA Best Practices as contained in the U.S. Access Board *Proposed Guidelines for Pedestrian Facilities in the Public Right of Way* (July 2011, and as amended by February 2013 Notice) or as further adopted or amended.

<http://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines>

- Traffic Control Device material shall be from the current *VDOT Pre-Approved Traffic Control Device*  
Listing: [http://www.virginiadot.org/business/resources/PREAPPROVED\\_LISTING.pdf](http://www.virginiadot.org/business/resources/PREAPPROVED_LISTING.pdf).
- OSHA/VOSH and applicable NEC and NESC standards and any revisions incorporated.
- *Manual of Accident Prevention* published by the Associated General Contractors of America, Inc. <http://www.agc.org/>
- *Rules and Regulations Governing Construction, Demolition and All Excavation* and adopted by the Virginia Safety Codes Commission [http://www.doli.virginia.gov/vosh\\_enforcement/vosh\\_vaunique\\_standards.html](http://www.doli.virginia.gov/vosh_enforcement/vosh_vaunique_standards.html)
- Virginia Erosion and Sediment Control [E&S] Handbook, Virginia Department of Environmental Quality. <http://www.deq.virginia.gov/Programs/Water/LawsRegulationsGuidance/Guidance/StormwaterManagementGuidance.aspx>

The aforementioned documents, as amended by issuing entities, are hereby incorporated into this contract by reference.

## 2. PROJECT DOCUMENTS

### A. Discrepancies and Errors

If the Contractor finds a conflict, error, ambiguity, omission or discrepancy in or between the Contract Documents and/or the site conditions, he shall immediately call it to the attention of the Project Manager, in writing before proceeding with the Work affected thereby. Work performed prior to written resolution thereof, shall be performed at the Contractor's risk.

### B. Copies Furnished

One (1) copy each of the Contract Plans, Drawings and Specifications will be provided to the Contractor without charge. The City shall make all plans, drawings and specifications available to the Contractor in PDF form.

### C. Documents to be Kept on the Job Site

The Contractor shall keep on the site of the project a copy of the Contract Documents including all authorized revisions, and shall at all times give the City and its authorized representatives access thereto.

### D. Ownership of Drawings and Specifications

All Drawings, Specifications and copies thereof furnished by the City are the City's property.

### E. Complementary Documents

- 1) The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all.
- 2) Figured dimensions on the plans shall be used in preference to scaling the Drawings. In case of conflict between small and large scale drawings, the large scale drawings shall govern.
- 3) The general character and scope of the Work are illustrated by the Drawings and listed in the Specifications. Any additional drawings and other instructions deemed necessary

by the Project Manager will be furnished to the Contractor when required for the Work and shall become incorporated into the Contract Documents.

- 4) Unless otherwise specified, the word "similar" where it occurs in the Drawings, shall be interpreted in its general sense and not as meaning identical, and all details shall be worked out in relation to their locations and connection with other parts of the Work.
- 5) Where "as shown", "as indicated" "as detailed", or words of similar import are used, it shall be understood that the direction, requirements, permission, approval or acceptance of the Project Manager is intended unless stated otherwise. As used herein, "provide" shall be understood to mean "provide complete in place," that is, "furnish and install."
- 6) Materials or work described in words which, so applied, have a well-known technical or trade meaning, shall be held to refer to the recognized technical or trade meaning.

### **3. BUILDING CODE REQUIREMENTS**

The Contractor certifies that all material supplied or used for the Work meets all current International Building Code (IBC) requirements and the requirements of the Virginia Uniform Statewide Building Code (USBC); and further certifies that, if the material delivered or used in the performance of the work is found to be deficient in any of the applicable state or national code requirements, all costs necessary to bring the material into compliance with the requirements shall be borne by the Contractor.

### **4. ADA & PROWAG COMPLIANCE**

The Contractor shall ensure that all Work performed under this Agreement is completed in accordance with the Contract Documents, including Work intended to meet the accessibility requirements of the Americans with Disabilities Act (ADA), Public Right of Way Access Guidelines (PROWAG), and any other applicable regulations, standards and best practices.

Should the Contractor discover any non-conformity with such requirements, the Contractor shall immediately inform the City to allow for corrective action.

### **5. OVERHEAD HIGH VOLTAGE LINES SAFETY ACT**

If any work required herein will be performed within 10 feet of an overhead high voltage line, the provisions of Virginia Statute 59.1-406, et. seq., "Overhead High Voltage Line Safety Act" (Act) shall apply. The "person or Contractor responsible for the work to be done", as that term is used in the Act, will be interpreted to mean the Contractor. The Contractor shall notify the owner or operator of the high voltage line in the manner prescribed in Section 59.1-411 of the Act in sufficient time prior to the Commencement of Work in order to avoid any delays. The City will not pay for lost time or profits, or permit any extension of the work for any delays caused by the failure of the Contractor to make such arrangements in a timely manner.

## **D. PRELIMINARY MATTERS**

### **1. SUBMITTALS**

#### **A. Required Submittals**

The following Submittals, at a minimum, are typically required for City projects:

- Schedule
- Maintenance of Traffic Plan



- Subcontractor Utilization Form
- Material and/or Supply List
- Samples

**B. Timeliness**

All Submittals shall be made so as to cause no delay in the Work, allowing reasonable time for review by the Project Manager. Except as otherwise specified, all Submittals shall be submitted at least ten (10) business days prior to the start of the affected work.

**C. Incomplete or Defective**

When Submittals cannot be adequately reviewed because a submission is incomplete, has been submitted out of sequence, is illegible, or for any other reason, the Submittal will be returned by the Project Manager without action, or will be held until such materials as are necessary are received. Incomplete or defective submissions as described above shall not be considered to have been submitted.

**D. Review**

The Project Manager shall review the Submittals with reasonable promptness. Review and/or approval of Submittals will be general for conformance with the design concept of the Work and compliance with the information given in the Contract Documents. Approval shall not be construed as permitting any departure from Contract requirements, as authorization of any increase in price, as verification of quantities or field conditions, nor as relieving the Contractor of the responsibility for any error in details, dimensions, or otherwise that may exist. The Contractor shall be responsible for the detailed accuracy of all Submittals. Deviations in Submittals from the requirements of the Contract Documents or construction standards shall not be relieved unless the Project Manager specifically accepts deviations named in writing by the Contractor.

**E. Required Information**

All Submittals shall include at least the following: Contractor's Name; Date; Contract Number; Identification of any deviations from Contract Documents; and Contractors stamp or signature indicating review of the Submittal, verification of field measurements, and compliance with Contract Documents. Contractor shall identify applicable products or portions of submittal documents which show multiple items (e.g. by circling items or marking in a contrasting color).

**2. SCHEDULE**

Unless otherwise specified, the Contractor shall within 14 days after the Award Date, or prior to the Pre-construction meeting, whichever occurs first, submit a schedule which shows the order in which the Contractor proposes to carry on the Work, including dates for starting and completing the various activities of the Work. The proposed Schedule shall include the project phasing per the proposed MOT) Plan, if applicable.

The Project Manager will review the schedule to verify compliance with the Contract requirements, and when accepted, such schedules shall govern the Work. The Contractor shall submit an updated schedule monthly with the request for partial payment. Review and acceptance by the City of the Contractor's schedule of completion shall in no way be interpreted to certify the feasibility or compliance of the schedule, and shall not relieve the Contractor of its responsibility to complete the Work within the contract time. The Contractor is responsible for maintaining the schedule of all work, including all work performed by authorized Subcontractors.

The Contractor shall participate in progress meetings coordinated by the Project Manager, at a frequency as directed, and shall prepare brief written reports upon request, including:

- A. Updated construction schedule;
- B. Identification of Critical Path Tasks and Long Lead Items;
- C. Status of permit acquisition, including compliance and inspection status;
- D. Any conditions that may require a Change Order or result in a potential claim;
- E. Scheduled work to be done by Subcontractors; and
- F. Status of any other particulars required during the course of the work (such as environmental inspections, resolution of issues, coordination with the public, etc.)

### **3. PERMITS**

Contractor shall obtain all permits as required for all Work performed under the Contract. Contractor is responsible for coordinating all required inspections related to such permits, and shall advise the Project Manager of all such scheduled inspections prior to occurrence.

Permit fees will be waived for all permits issued by the City, for all work performed within the City of Falls Church. Issued permits shall be displayed and/or maintained on site as DPW directs.

### **4. PRE-CONSTRUCTION MEETING**

Prior to the Commencement of Work, and as determined by the Project Manager, a meeting will be arranged between the Contractor, Project Manager, and other City staff or consultants as appropriate. The purpose of the Pre-Construction Meeting is to discuss all aspects of the Work, including DPW policies and regulations, scheduling, administrative matters, documentation requirements, and project safety.

### **5. PROTECTION OF UNDERGROUND UTILITIES**

The Contractor is directed to protect and maintain service to adjacent buildings for both public and private utilities. Contractor is responsible for complying with all aspects of Virginia Code Section 56-265.4 (Chapter 10.3) *Underground Utility Damage Prevention Act*, and related laws and regulations.

The Contractor shall be responsible for contacting Miss Utility of Virginia (Virginia Utility Protection Service) for location of any underground utilities and/or services situated in the work area which could be damaged by the Contractor's operation. Copies of Miss Utility tickets shall be provided to the City for the final record.

The Contractor shall coordinate closely with the City to determine location of private utilities.

### **6. UTILITY ADJUSTMENTS**

Separate payment will not be made for utility adjustments, unless otherwise specified in the Contract. Contractor shall coordinate and effect all utility adjustments.

### **7. CONTRACTOR'S EQUIPMENT & CONTRACTOR PARKING**

All Contractor and Subcontractor equipment used on the job shall meet all Federal, State, and local safety requirements. The equipment shall be licensed to operate in Virginia. In addition, the company's name or logo shall be clearly displayed on all trucks used on all jobs. Contractor shall run construction equipment only when necessary and not outside permitted work areas.

The Contractor shall submit a plan for parking and location of equipment for City approval prior to the start of Work. The Contractor is responsible for payment of any parking charge or fines resulting from illegal parking of its or its Subcontractors' vehicles.

Clear access to and from residential properties and businesses shall be maintained by Contractor at all times within the Limits of Work. The Contractor is expected to minimize impact to City residents: blocking driveways or sidewalks, or leaving equipment on private property is unacceptable.

## **8. STAGING & LAYDOWN AREAS**

The Contractor shall submit a plan for staging and laydown areas for City approval prior to the start of Work. Such plan should include minimizing impact to City residents, avoiding Plant Protection Areas, and planning for maximum efficiency.

## **E. RESPONSIBILITIES**

### **1. AUTHORITY OF CITY PROJECT MANAGER & OVERSIGHT**

The Director of the Department of Public Works (DPW) or designee will serve as Project Manager and will provide work assignments, oversight and guidance to the Contractor for the implementation and administration of all technical aspects of the Contract. Where the term "Engineer" is used, it shall be interpreted to mean "Project Manager."

The Contractor must carry out the instructions of the Project Manager regarding the Work. The Project Manager has the authority to enforce contract provisions and to:

- A. Stop work whenever necessary to protect City or private property, or for public safety.
- B. Reject materials and workmanship that do not conform to contract requirements.
- C. Request the removal of Contractor or Subcontractor personnel per the Section entitled "Contractor's Performance & Personnel."
- D. Direct unacceptable work to be removed and replaced with acceptable work.

The Contractor shall notify Project Manager in writing in all cases when the Contractor believes that an order or direction issued by a Project Manager necessitates a Change in Work (See Section entitled "Change in Work").

### **2. AUTHORITY OF INSPECTOR**

The Inspector has the authority to reject materials or suspend work if the quality of either is in dispute: settlement of a dispute is decided by the Project Manager. The Inspector may be authorized by the Project Manager to collect materials tickets or other required documentation.

An Inspector's authority does not extend to modification of any of the provisions of the contract documents, acceptance of the work, acting as a supervisor for the Contractor, or improper interference in the Contractor's project management.

Project Inspector(s) may be City staff and/or a third party City contractor.

### **3. AUTHORITY OF CITY ARBORIST**

The City Arborist has the authority to direct and inspect all applicable Work for the preservation, protection, removal, and planting of trees, shrubs, and other plants; reject materials or workmanship not meeting applicable standards; and prescribe mitigation measures to be

implemented at the Contractor's expense in the event that trees, shrubs, or plant protection areas are compromised.

The City Arborist has the authority to require additional or enhanced plant protection measures at the Contractor's expense if the Contractor is unable or unwilling to adequately maintain protection measures required by the plan, in the opinion of the City Arborist.

#### **4. LIMITATIONS ON CITY'S RESPONSIBILITIES**

Except as modified by the Contract documents, the City shall not supervise, direct, or have control or authority over, not be responsible for: the Contractor's means, methods, techniques, sequences or procedures of construction; safety precautions and programs related to safety; or the Contractor's ability to perform/furnish the Work in accordance with the Contract documents.

#### **5. CONTRACTOR RESPONSIBILITIES**

##### **A. General**

It shall be the Contractor's responsibility, at solely the Contractor's cost, to provide sufficient resources and services to fulfill the purposes of the Work. Nothing in the Contract Documents shall be construed to limit the Contractor's responsibility to manage the details and execution of the Work.

The Contractor shall defend and hold the City harmless from any expense or liability arising from the Contractor's non-compliance in meeting its obligations herein. The Contractor shall be responsible for all costs related to such non-compliance.

##### **B. Key Contact Personnel**

At the Pre-Construction meeting, or prior to the start of Work if no Pre-Construction meeting is held, the Contractor shall submit names and contact information for its Key Contact Person(s):

- During routine City working hours (8:00 AM – 5:00 PM, Monday to Friday); and
- For emergency calls outside routine City working hours.

An answering machine is not acceptable as a point of contact. A voicemail paging system or answering service in lieu of a contact person shall be required to initiate a callback to the City within 15 minutes.

Prior to changes to the Contractor's Key Contact Personnel, the Contractor shall advise the City and submit updated contact information.

##### **C. Contractor's Performance & Personnel**

Contractor shall ensure that all personnel assigned to the Work are trained, skilled and qualified to perform respective services; possess the appropriate licensing or certification; and are directly employed and supervised by the Contractor (unless pre-approved by the City as an authorized Subcontractor). All personnel working on the job shall wear clothing which clearly identifies them as employees of the Contractor or Subcontractor. Uniforms or tee shirts, which display the name or logo are acceptable. Personnel may be required to wear a Contractor-supplied, photo identification badge. Such badges must be clearly visible when worn.

The City reserves the right to reject personnel who, in the City's judgment, are not adequately qualified to perform the Work. If any Contractor or Subcontractor employee on the job appear to the City to be incompetent or to act in a disorderly or improper manner,

said person shall be removed immediately upon request of the Project Manager or Inspector. Said person shall not be re-employed on the subject project except by written consent of the Project Manager.

Possession of alcoholic beverages or illegal drugs on the job site by a Contractor or Subcontractor employee is prohibited and will result in immediate removal of the individual from the site. Said individual may not return to the job site.

#### **D. Communications**

At least one on-site worker who has supervision authority must be conversant in the English language. This is necessary because of the need to provide job instructions, ensure compliance with safety regulations and communicate with City staff and/or other Contractors on site. The City shall be sole judge of the communication level of the Contractor's employees. Failure to have an English-speaking worker on site is cause to halt work until the situation is remedied. Should this happen, it shall be at no additional cost to the City.

#### **E. Actions of Contractor During Emergency**

In case of an emergency which threatens loss or injury of property and/or safety of life, the Contractor shall act without previous instructions from the Project Manager as the Contractor sees fit. The Contractor shall notify the Project Manager thereof immediately thereafter. Any compensation claimed by the Contractor due to such extra work shall be submitted to the Project Manager for review through the Change Order process.

### **9. SUBCONTRACTORS**

The Contractor shall obtain City approval for all Subcontractors in accordance with the IFB Section entitled "Subcontractors." The City's *Subcontractor Utilization Form* (see Appendix) shall be submitted to the Project Manager for review and written authorization prior to any work performed by Subcontractors.

At all times when an authorized Subcontractor is working on site, a representative of the Contractor who is knowledgeable about the Work must be on site as well.

## **F. PROTECTION**

### **1. EROSION AND SEDIMENT CONTROL**

The Contractor shall comply with all local, State and federal laws and regulations regarding erosion and sediment control. Land disturbing activities of 2,500 SF or more require submittal of an Erosion and Sediment Control (E&SC) Plan, including appropriate inlet protection.

All temporary E&SC Measures shall be removed by the Contractor at his expense and prior to Final Inspection.

### **2. TREE & LANDSCAPE PROTECTION MEASURES**

Contractor shall follow the requirements described in the City's current edition of its *Tree and Landscape Specifications*.

### **3. STORMWATER FACILITIES**

Contractor shall be responsible for protection of all stormwater facilities, onsite or offsite, affected by the Work. Stormwater inlet protection must be installed by the Contractor in compliance with the current edition of the Virginia Erosion and Sediment Control Handbook,

unless otherwise agreed to by the City. The Contractor shall maintain such measures throughout the project.

## G. SAFETY

The Contractor shall submit a Safety Plan to the Project Manager prior to the PreConstruction Meeting.

The Contractor shall comply with and ensure that the Contractor and Subcontractor personnel and equipment comply with all current applicable local, state and federal policies, regulations and standards relating to safety and health. This shall include but is not limited to the standards of the Virginia Occupational Safety and Health Administration for General Industry and for the construction industry. The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all injury to persons and damage to property either on or off the site, which occur as a result of the Contractor's prosecution of the Work.

While on the job site, all Contractor and Subcontractor personnel shall wear required personal safety equipment. Personal safety equipment shall include, but not be limited to hard hats, hearing protection, eye protection, proper clothing, and footwear as required by OSHA standards. The Contractor shall obey all safety rules and regulations and shall not create hazardous conditions within or around the work site.

The Contractor shall immediately discontinue any operations of the Contractor determined unsafe by the Project Manager, Inspector or designee, upon receipt of either written or oral notice. The City reserves the right to require the removal and replacement of any employee or equipment of the Contractor or Subcontractor at the work site when, in the Project Manager's or Inspector's judgment, that person or equipment is not performing safely.

The Contractor shall take or cause to be taken such additional safety and health measures as the City may determine to be reasonably necessary.

## H. CONSTRUCTION ACTIVITIES

### 1. WORK HOURS AND NOISE LEVELS

Work hours shall be limited to weekdays (except for City holidays as listed on the City website [www.fallschurchva.gov](http://www.fallschurchva.gov)) from 7:00 AM to 5:00 PM, unless otherwise pre-approved by the Project Manager. For certain projects, other work day and hour restrictions may apply.

See the Section entitled "Traffic Control" for additional work hour restrictions. The Contractor shall comply with City Code regarding noise levels. Noise generated by equipment is regulated by City Code *Article III – Noise, Section 14Environment*.

### 2. PROGRESS OF THE WORK

#### A. Notice to Proceed

The City shall provide the Contractor with a written Notice to Proceed (NTP), listing the date on which the Work is to be commenced. Every calendar day thereafter shall be counted in computing the actual Time for Completion.

#### B. Time for Completion

It is understood and mutually agreed by and between the Contractor and the City that the Commencement Date, the rate of progress, and the Time for Completion of the Work to be done hereunder are essential conditions of the Contract.

### C. Rate of Progress

The Contractor agrees that the Work shall be started promptly upon the Commencement Date and shall be prosecuted regularly, diligently, and uninterruptedly at a rate of progress that will ensure full completion thereof in the shortest length of time consistent with good workmanship.

### D. Use of Completed Portions *(See also Section M3 - Substantial Completion)*

The City shall have the right to take possession of and use any completed or partially completed portions of the Work. Taking such possession and use shall not be deemed an acceptance of any work not done in accordance with the Contract Documents. If the Contractor believes that such prior use may increase the cost, or delay the completion of remaining work, or cause refinishing of completed work, the Contractor shall so advise the City prior to the City taking possession and may submit a claim for a Change in Work by Change Order.

## 3. SURVEYS AND CONTROLS

The Contractor shall be responsible for laying out the Work and shall retain a professional land surveyor licensed in the Commonwealth of Virginia to survey and provide all necessary construction layouts and to establish all control lines, grades, and elevations during construction. The Contractor shall be responsible for any mistakes or construction errors that may be caused by errors in the layout or the loss or disturbance of reference points.

## 4. TRAFFIC CONTROL

### A. Maintenance of Traffic (MOT) Plans

For all work proposed within the City right-of-way, the Contractor shall provide a detailed MOT in compliance with the latest edition of the Virginia Work Area Protection Manual (WAPM). MOT Plans shall be submitted to the Project Manager for review and approval at the time of submittal of the proposed schedule. Maintenance of Traffic shall conform to City ROW Permit General Conditions for notification.

All MOT Plans shall comply with the following requirements:

- Broad Street and Washington Street: Between the hours of 9:00 AM and 3:00 PM on Monday through Friday, at least one through lane shall be maintained in each direction. ***No lane closures or other restrictions are permitted on Broad Street or Washington Street outside of these hours, without prior City approval.***
- All other streets: Work is generally permitted between the hours of 7:00 AM and 5:00 PM, but may vary based on local conditions (e.g. school functions, special events, etc.). Onsite work must adhere to the City of Falls Church Noise Ordinance.
- Pedestrian detours shall be provided when sidewalks are closed for construction. Contractor shall submit pedestrian detour plans as part of the MOT Plan for approval by the Project Manager.

- The construction vehicle haul route, staging areas and parking plan will be shown on the MOT plan. Haul routes and parking are generally not permitted along more than one residential street per phase.
- Street names, travel lane widths and existing transit stops must be clearly shown on the plan.

#### **B. MOT Plan Implementation**

The Contractor shall provide all devices and labor related to the implementation of the approved MOT Plan. Traffic control must be inspected by the Project Manager, Inspector or designee prior to Commencement of Work at any location. Any traffic control deficiencies shall be immediately corrected by the contractor.

The Project Manager shall be notified no less than 72 hours prior to beginning construction which will impact City right-of-way or traffic. Under no circumstances shall a roadway be closed for construction without issuance of a Right-of-Way Permit and appropriate notification. Failure to adhere to the permit and MOT plan may result in stop work orders and/or the assessment of fees.

All flaggers shall be certified by VDOT or other approved entity. The Contractor shall provide copies of flagger certifications for scheduled personnel prior to the Commencement of Work. Flagger shall have certification cards on their persons at all times while engaged in flagging operations.

Trash and recycling collection typically occurs throughout the City every Wednesday. Contractor shall make provisions to accommodate trash collection for residences affected by the Work.

Residential and emergency access shall be maintained at all times during construction.

Pedestrian paths shall not be blocked by work vehicles, construction equipment or temporary traffic control devices unless an approved pedestrian detour is provided.

#### **C. Traffic Control Devices**

In the event that a construction site in the opinion of the Police Department, Fire Marshal, DPW Inspector or the Project Manager, is improperly signed, barricaded, or lighted, the Contractor will be so notified. If the Contractor cannot be reached immediately or fails to take necessary corrective measures, a stop work order may be issued until such corrective action is taken. A Change Order for stop work orders due to improper traffic control or work area management will not be granted.

Unless otherwise stipulated in the contract, unit pricing shall be inclusive of all labor, materials, and work necessary to set up, maintain, inspect and remove traffic control. No separate payment will be made by the City for maintenance of traffic, unless listed as a pay item on the Bid Sheet.

### **5. INSPECTIONS**

Inspections will be performed as needed and as required by the City at its sole discretion and according to issued permits. All stages, materials, and details of the Work are subject to inspection at any time.

The Contractor and its authorized Subcontractors shall provide the Project Manager, Inspectors, and City Staff with full and safe access to all parts of the work. The Contractor shall additionally furnish such information and assistance as needed for complete, timely and



detailed inspections. The City and its authorized personnel shall have ready access to machines and plant equipment used in processing or placing materials.

Prior to Work, the Project Manager will meet with the Contractor to establish an understanding of the critical stages of work that shall be performed in the presence of the Inspector. At a minimum, the Contractor shall schedule inspections as required by the Building Official and shall notify the Project Manager 24 hours in advance of the following stages of construction when inspection shall be required:

- Prior to concrete pour when forms are in place and base material is in place
- Prior to installing conduit in slots or trenches
- Prior to backfilling any pipe or conduit
- Prior to laying final surface course
- Prior to excavation, trenching or boring for underground conduits
- Prior to installation of signal and electrical wires & cables
- Prior to installation of clamp on lighting for traffic signal poles
- Prior to traffic signal placement on mast arms, before drilling holes

Additional inspections may be necessary and shall be discussed at the Pre-construction meeting. For Final Inspection procedures, see the Section M *Project Close Out*.

## **6. CHANGE IN WORK**

If the Contractor believes that any instructions by the Project Manager, by drawings or otherwise, will result in a Change in Work, then the Contractor shall give written notice thereof before proceeding to execute the work (except in emergencies endangering life or property). Said notice shall be given promptly enough to avoid delaying the work and in no instance later than ten (10) calendar days after the receipt of such instruction. The Contractor's notice must provide the amount of additional cost claimed, together with the basis thereof and supporting documentation. No such claims for extra cost shall be valid unless so made. If such notification is not given, Contractor hereby agrees to waive any claim for extra compensation and/or time.

If the Project Manager agrees that such instructions involve a Change in Work for the Contractor, any adjustment to compensation or Time of Completion will be authorized through the Change Order process.

## **7. DIFFERING SITE CONDITIONS**

The Contractor shall, within twenty-four (24) hours after becoming aware of differing site conditions, and before Work continues, give written notice to the Project Manager of subsurface or latent physical conditions which differ materially from those indicated in the Contract Documents, or previously unknown physical conditions of an unusual nature discovered at the site and which differ materially from those ordinarily expected.

The Project Manager will investigate the site conditions within two (2) business days after receiving the notice. If the conditions do materially differ to the extent that a Change in Work is necessary, an equitable adjustment may be made by Change Order.

No request by the Contractor for an adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required. If the Contractor proceeds with any work that may be affected by such differing site conditions before giving written notice to the Project Manager, such work shall be at the Contractor's sole risk and expense.

## **8. MATERIALS AND WORKMANSHIP**

The Contractor shall insure that all work, including that of all Subcontractors, is of the highest quality. Skilled artisans and laborers shall perform work as needed.

For every trade and every product, the installation and application techniques shall be in strict accordance with the highest quality prescribed by current applicable trade standards and practices. Manufactured articles, material, and equipment shall be applied, installed, connected, used, cleaned, and conditioned in accordance with the manufacturer's directions.

## **9. QUANTITIES**

The City reserves the right to change, add or delete any categories or quantities. The quantities actually required to complete the Work may be more or less than so estimated on the Bid Sheet, which was intended for evaluation purposes. Contract Unit Pricing shall be used to calculate any changes in quantities required by the City either as additions to or deductions from the Work. Estimates shall not oblige the City to pay the estimated amount in full, but rather, all work shall be compensated for per actual quantities provided and installed at the contract unit prices.

## **10. MAINTENANCE OF WORK SITE**

The Contractor shall propose staging and laydown areas and any needed storage areas in the vicinity of the project. Areas used by the Contractor within the public right-of-way require the prior approval of the Project Manager. All costs associated with the use, maintenance, and final restoration of areas needed shall be at the sole expense of the Contractor. When storing construction materials, the Contractor shall insure that they are stored safely, protected, and do not have a tendency to become unstable.

Contractor shall, at Contractor's expense:

- Arrange for and maintain a staging area, subject to City approval.
- Maintain access to all properties and City services.
- Locate trailers and equipment as far as possible from nearby occupied dwellings.
- Keep the site neat and policed so that debris will not be transported to neighboring properties by wind or other means.
- Caution workers to speak quietly and use language not offensive to citizens in the area.
- Locate and maintain portable sanitary facilities on a secluded or concealed portion of the site.
- Where appropriate, provide lighting and/or fencing to make unauthorized access to the site during non-working hours more difficult.
- Where dust may become a nuisance, provide means for dust control.
- Ensure that all equipment, materials, and staging areas associated with the project protect City trees and other vegetation to the satisfaction of the City Arborist.
- Keep grass and weeds within the project limits trimmed.

## **11. UNSATISFACTORY WORK**

If any of the work done, or material, goods, or equipment provided by the Contractor is unsatisfactory to the City (e.g. does not meet minimum standards or specifications), the Contractor shall, upon notification, immediately remove such unsatisfactory work, material, goods, or equipment and replace the same with work, material, goods, or equipment satisfactory to the City. Such removal and replacement shall be at the Contractor's expense.

In the event that the Contractor fails within 15 calendar days after receipt of written notice to remove improper or unsuitable work, material, goods, or equipment and replace it with suitable

and satisfactory work, material, goods, or equipment, the City shall have the right, but not the obligation, to remove or replace the rejected work, material, goods, or equipment at the expense of the Contractor. This paragraph applies both during the Contract term and during any warranty or guarantee period. At its discretion, the City shall be entitled to offset such expense against any sums owed by the City to the Contractor under this Contract. If the City deems it expedient not to require correction or replacement of work which has not been done in accordance with the Contract, an adjustment to the Contract Amount may be made.

## **12. JOB SITE DAMAGES**

It shall be the responsibility of the Contractor to report to the Project Manger any damage discovered prior to commencing any work at the job site.

The Contractor shall be responsible for any damage claim, which may arise as a result of the Contractor's operations. Repair, replacement, or mitigation of damages shall be completed to the satisfaction of the City and shall be accomplished by the Contractor within fifteen (15) calendar days (or other period as agreed by the City) after notification by the City. The City reserves the right to require the Contractor to have any repair work executed by an approved Subcontractor who specializes in workmanship required to rectify damages. Damage to vegetation intended to be protected shall be handled according to the City's current edition of its *Tree & Landscape Specifications*.

The City shall not be responsible for losses or damage to Contractor's supplies, tools, and/or equipment.

## **13. REMOVAL & DISPOSAL OR SALVAGE OF MATERIALS**

All existing materials and equipment removed, including lighting poles and fixtures, are the property of the City of Falls Church. Salvageable materials shall be delivered to the City Property Yard at 7100 Gordon Road, at the direction of the Inspector or Project Manager. Contractor shall arrange for the delivery of salvaged equipment at least 48 hours in advance.

Tree and Stump removal shall follow the City's current edition of its *Tree & Landscape Specifications*.

Removed items which the City deems unsalvageable shall be disposed of by the Contractor at the Contractor's expense. Separate payment will not be made for removal and disposal or salvage of existing materials or equipment.

## **14. INSPECTION OF & TITLE TO MATERIALS**

The City's right of inspection shall not be deemed to relieve the Contractor of its obligation to ensure that all articles, materials and supplies are consistent with specifications and instructions and are fit for their intended use. The Contractor shall be responsible for maintaining all materials and supplies in the condition in which they were accepted until they are used in the Work.

No materials or supplies for the Work shall be purchased by the Contractor or any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that it has good title to, and that it will require all Subcontractors to warrant that they have good title to, all materials and supplies for which the Contractor invoices the City for payment.

Risk of loss or damage to all items shall be the responsibility of the Contractor until Final Acceptance by the City. This provision will not be construed as relieving the Contractor from having sole responsibility for all materials and work upon which payments have been made and for the restoration of any damaged work or replacement or repair at the City's option of any

damaged materials. This provision will not be construed as a waiver of the City's right to require fulfillment of all terms of the Agreement, including full rights under the terms of the Warranty provision, nor shall payment indicate acceptance of the materials or work.

It is expressly agreed that after any payment has been made by the City to the Contractor, the City will have a lien upon all material delivered to the site either by the Contractor or any Subcontractor, or for the Contractor, which is to be used in the performance of the Contract.

## I. TREE WORK, TREE AND LANDSCAPE PLANTING REQUIREMENTS

Contractor shall comply with the City's current edition of its *Tree & Landscape Specifications*.

## J. TESTING & QUALITY ASSURANCE

Materials used in the work shall meet all quality requirements of the Contract documents. In order to expedite inspection and testing of materials, the Contractor shall notify the Project Manager in writing of the proposed sources of materials promptly after contract award. When so required by the City, the Contractor shall complete and submit VDOT Form C-25 *Source of Materials* (or other approved City form).

Material shall be produced with a reasonably uniform quality and within requirements specified; the producer shall perform quality control tests which the producer believes necessary to control the product adequately. The City will conduct any tests or inspections it may deem advisable to assure that goods or services conform to its specifications. All materials for use in the project are subject to inspection and testing at any time prior to and after being incorporated into the Work. All work shall be performed using material represented by approved samples.

The Contractor shall cooperate with testing firms hired by the City and the acquisition of any desired samples.

All costs in connection with re-testing shall be borne by the Contractor. Failure of any material to pass specified tests will be sufficient cause for refusal to consider, under this Contract, any further materials of the same brand or make. Samples of various materials delivered on the site or in place may be taken by the Project Manager for testing. Samples failing to meet the Contract requirements will automatically void previous approvals of the items tested.

Unless otherwise specified, no separate payment will be made to the Contractor for testing.

## K. CHANGE ORDERS

### 1. INITIATION OF CHANGE ORDERS

Change Orders shall be initiated when any substantive change in the original specifications or scope is deemed necessary by the City or the Contractor. The change must be of a nature that corrects errors in drawings; considers unforeseen site conditions; addresses previously unknown conditions not recorded in official documentation; captures omissions necessary for the project's successful completion; or encompasses changes in quantity, materials, approach, or other fundamental deviations from the original specifications or project scope.

Proposed Change Order (PCO): The Contractor may only initiate a change order request within the established project scope. A request initiated by the Contractor shall provide all supporting documentation, including a written statement of the reason for the change, a

statement addressing the reason the work was not included in the original bid, and the impact the proposed change will have on the project timeline, price, and other associated factors. The City will not be liable for the cost of Changes in Work not approved in writing before the work begins, except as necessary to protect life and property.

A PCO initiated by the City will contain a description of the intended change with supplementary revised drawings, project scope, specifications and a revised projected Time of Completion if necessary. The City may make changes by addition, deletion or revision in the Work without invalidating the Contract. All such work shall be executed under the conditions of the original Contract, with an adjustment to the Contract Amount and/or Time of Completion as applicable.

## **2. MINOR CHANGES BY PROJECT MANAGER**

The Project Manager shall have authority to make minor changes in the Work by verbal order when such changes do not involve extra cost, are immediately necessary for safety reasons, and are not inconsistent with the purpose of the Project. Otherwise, except in an emergency endangering life or property, no Change in Work shall be made unless in conjunction with a Change Order signed by the City; and no claim for an addition to the Contract Amount or Time of Completion shall be valid unless so authorized and documented.

## **3. CHANGE ORDER PRICING**

Unit Price Items: The City expressly reserves the right, except as may be otherwise specifically limited, to increase or decrease quantities of work for which the Contract contains unit pricing. Adjustments in quantities shall be made using the unit prices.

Other Work: For any change in work which is not covered by Unit Prices, the Contractor shall submit an itemized PCO. Wherever possible, costs shall be organized into Line Item quantities such that a unit price can be established for each component of the Work. The City will review the PCO and may enter into negotiations with the Contractor if the PCO is not determined to represent a fair and reasonable cost for the work.

## **4. UNILATERAL CHANGE ORDERS**

In the event that the City and Contractor are unable to agree upon a cost and/or time to perform a requested Change in Work, the City will issue a Unilateral Change Order. The Unilateral Change Order will specify the cost and time to perform the work based upon the Project Manager's estimate, the Contractor's proposals, and any other relevant information. Upon determination by the City of a fair and reasonable cost and time, a Unilateral Change Order will be issued and shall become binding upon the Contractor.

## **5. EXTENSIONS OF THE TIME OF COMPLETION**

### **A. Claims for Delay**

The Contractor's sole relief for any claim for delay other than Force Majeure, and which is caused by entities or conditions fully outside the control of the Contractor, Subcontractors, Suppliers, and any other persons or firms associated in any way with the Contractor, shall be an extension of the Time of Completion and/or the Contractor's direct costs which result from the delay.

The Contractor's sole relief on any claims for delay caused by Force Majeure shall be an extension of the Time of Completion, provided the Contractor gave the Project Manager timely written notice at the inception of such delay.

No extension of the Time of Completion will be granted for any delay unless the Contractor demonstrates the claimed delay directly impacts the Critical Path of the Work, and any float has been consumed.

#### B. Notification Requirement

The Contractor shall not be entitled to any Claims for Delay unless the Contractor notifies the City in writing immediately upon discovery of such delay.

The Contractor's complete submittal for a time extension and any claimed damages shall be submitted no later than thirty (30) calendar days after cessation of the delay or within such longer period as the City may agree in writing to allow. The Contractor's full Submittal to the City shall specify the nature of the delay claimed by the Contractor, the cause of the delay, the impact of the delay on the Contractor's Work schedule, and all supporting documentation.

#### C. Extensions Due to Adverse Weather Delays

The Contract Time of Completion will not be extended due to inclement weather conditions which are normal, as defined below, for the City of Falls Church. The Contract Time of Completion includes an allowance for workdays which according to historical data may not be suitable for construction work. The Contractor may request extension to the Time of Completion only if it can demonstrate each of the following Criteria:

- That one or more of the Weather Conditions listed below was encountered; and,
- The occurrence of the Weather Condition(s) resulted in an inability to prosecute work which would have otherwise been performed on the day(s) the Weather Condition(s) occurred; and,
- The work which was not able to be completed was on the Critical Path and could not be completed **only** due to the Weather Condition(s) claimed.

The Contractor must provide notice of delay to the Project Manager no later than five (5) calendar days after the onset of the delay which satisfies the criteria listed above. A fully documented claim for a time extension under this section shall be submitted no later than thirty (30) calendar days after the cessation of the delay. It shall be the Contractor's responsibility solely to provide the necessary documentation to satisfy the Project Manager that all of the Criteria above were realized.

The Project Manager will determine the Contractor's entitlement to an extension of the Contract Term. A time extension of no more than one (1) day will be granted for one (1) day of lost work which satisfies the Criteria above, regardless of the number of Weather Conditions encountered. The Contractor's sole relief shall be an extension of the Time of Completion and no claim for an increase in Contract Amount will be allowed.

The Weather Conditions listed below will be the only basis for consideration by the City, subject to the Criteria above, as an extension of the Contract Term due to inclement weather or weather-related site conditions.

**Adverse Weather Condition #1: Unusually Heavy Precipitation** - Figure 1 illustrates the anticipated monthly inclement weather due to precipitation (Rain Days). If the number of days (including weekends, holidays, or other days not worked) with precipitation in excess of 0.10", as recorded at Washington Reagan National Airport,

exceeds the anticipated Rain Days, the Contractor may be entitled to an extension of one (1) day on the Contract Term for every day in excess of the Rain Days illustrated in Figure 1. The anticipated value of Rain Days for partial months at the beginning and end of the Contract shall be evaluated on a pro-rated basis.

<b>FIGURE 1.</b> Average days with precipitation of 0.1" or more											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6	5	7	7	7	6	6	5	6	5	5	6

**Adverse Weather Condition #2: Temperature** – The Contractor may be entitled to an additional day for every day that the recorded high temperature at Washington Reagan National Airport is 40 degrees Fahrenheit or less, that has not already been claimed under Weather Condition #1 above.

## L. PAYMENTS & RETAINAGE

### 1. Progress Payments

#### a. Applications for Payments

- i. The Contractor shall use a City-approved Pay Application format to invoice the City for completed work (see sample in the Appendix).
- ii. Contractor shall submit to City Project Manager for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that the City has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect the City's interest therein, all of which must be satisfactory to the City.
- iii. The Contractor shall, upon the City's request and as the City determines is necessary, furnish signed Affidavits of payment stating that all previous progress payments received on account of the Work have been applied to discharge Contractor's legitimate obligations (e.g. payment of subcontractors).

#### b. Retainage

Five percent (5%) of the amount of each progress payment will be retained by the City until Final Completion and Acceptance of the Work.

#### c. Review of Pay Applications

- i. The City will, within 10 days after receipt of each Application for Payment, either approve payment or return the Application to the Contractor, indicating in writing any corrections needed. The Contractor shall make any necessary corrections and resubmit the Application.
- ii. The City's review of the Contractor's Work for the purposes of approving payments, including final payment, will not impose responsibilities on the City:
  1. To supervise, direct, or control the Work; or
  2. For the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto; or
  3. For Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work; or
  4. To make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price; or
  5. To determine that title to any of the Work, materials, or equipment has passed to the City free and clear of any Liens.
- iii. The City may also choose not to approve payment in full or in part to such extent as may be necessary in the City's opinion to protect the City from loss because:
  1. The Work or portion thereof has not been completed; or
  2. The Work is defective, or completed Work has been damaged, requiring correction or replacement; or
  3. The Contract Price has been reduced by Change Orders; or



- iv. The City has been required to correct defective Work or complete Work. If the City chooses not to make payment of the full amount requested by the Contractor for any of the reasons listed above, the City will give the Contractor written notice stating the reasons for such action and the corrective actions needed. The City shall promptly pay the Contractor any amount remaining after deduction of the amount so withheld. Promptly upon Contractor taking remedial action, the City shall pay the Contractor the amount so withheld, or any adjustment thereto agreed to by the City.

## M. PROJECT CLOSE OUT

### 1. SUBSTANTIAL COMPLETION

- A. For certain projects, the City (at its sole discretion) will allow for Substantial Completion of the Work or an agreed upon portion of the Work. This may facilitate the occupation and use of the Project (or a portion thereof) for its intended purposes, from both an operational and safety standpoint.
- B. When the Contractor considers the Work ready for its intended use the Contractor shall notify the Project Manager for the City in writing that the Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that the City issue a certificate of Substantial Completion.
- C. Within 7 days after Contractor's notification, the City and Contractor shall make an inspection of the Work to determine the status of completion. If the City does not consider the Work substantially complete, the City will notify Contractor in writing and give reasons therefore.
- D. If the City considers the Work substantially complete, the City will deliver to Contractor a Certificate of Substantial Completion which shall fix the date of Substantial Completion.
- E. At the time of delivery of the Certificate of Substantial Completion, the City will deliver to the Contractor a written recommendation as to division of responsibilities pending final payment between the City and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. All incidental work shall be completed within 30 days from date of Substantial Completion Letter. Unless the City and Contractor agree otherwise in writing, recommendation will be binding between the City and Contractor until final payment.

#### F. Partial Utilization

Prior to Substantial Completion of all the Work, the City may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which the City and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by the City for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

- 1) The City may at any time request Contractor in writing to permit the City to use or occupy any such part of the Work which the City believes to be ready for its intended use and substantially complete, upon mutual agreement with the Contractor.
- 2) Within a reasonable time after either such request, the City and Contractor shall make an inspection of that part of the Work to determine its status of completion. If

the City does not consider that part of the Work to be substantially complete, the City will notify the Contractor in writing giving the reasons therefor. If the City considers that part of the Work to be substantially complete, the provisions of Section 3 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

## **2. NOTICE OF COMPLETION & FINAL INSPECTION**

When the Work in the opinion of the Contractor has reached Final Completion, the Contractor shall notify the Project Manager in writing at least five (5) days in advance that the work will be ready for Final Inspection on a specified date, which date shall be stated in such notice. For specific designated projects, a VDOT inspector must be present.

If Final Inspection reveals work not performed in accordance with the requirements of the Contract Documents, or uncompleted work, the City shall identify such deficiencies on a written Punch List issued to the Contractor within two (2) business days. The Contractor shall promptly perform the work required and request another Final Inspection. When a Final Inspection has been completed with no deficiencies, the date of Final Completion will be fixed as that last inspection date.

## **3. AS-BUILT DRAWINGS**

As-built drawings shall be the responsibility of the Contractor. The Contractor shall maintain and mark up one (1) set of Construction Plans and Drawings to portray as-built construction. The prints shall be neatly and clearly marked to show all variations between the Work actually performed and that indicated on the original Contract Drawings, including all utilities encountered in the Work. All drafting shall conform to good drafting practice and shall include such supplementary notes, legends and details as may be necessary for legibility and clear portrayal of the as-built construction.

At the completion of the Project and prior to request for Final Payment, the Contractor shall turn over to the Project Manager a complete set of As-Built drawings and plans.

## **4. FINAL PAY REQUEST & AFFIDAVIT OF RELEASE**

Upon Final Completion and before Final Acceptance, the Contractor will submit the following to the Project Manager:

- Signed Contractor Affidavit of Release of all Liens and Claims (*See Appendix*);
- Signed Subcontractor Affidavit of Release of all Liens and Claims (*See Appendix*);
- As-Built Plans;
- Any outstanding materials certificates;
- Construction Logs;
- Certificates of Inspection;
- Maintenance and Operating Instructions, as applicable;
- Required DBE/MBE documentation and reports, as applicable;
- Any other outstanding documentation requested by the City and required by Contract Documents; and
- Contractor's Final Pay Invoice, including retainage.

The Affidavit of Release shall state that so far as the Contractor has knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed. Contractor shall obtain signed Certifications of Payment from all Subcontractors utilized in the Work, and submit original signed Certifications to the City.

Should any Subcontractor refuse to furnish a release or receipt in full, Contractor must so advise the Project Manager immediately. In such a case, the Contractor may furnish a bond satisfactory to the City as indemnification against a possible lien. If any lien remains unsatisfied after all payments have been made, the Contractor shall refund to the City all money that the City may be compelled to pay in discharging such lien. Failure to properly pay Subcontractors and suppliers will result in the Contractor being adjudged in Default of the Contract Documents.

## 5. CERTIFICATE OF COMPLETION & FINAL ACCEPTANCE

Upon completion of the Work, Final Inspection, acceptance of any outstanding work, and receipt of final documentation as required by the Contract Documents and outlined above, the City Project Manager shall file a written Certificate of Completion & Final Acceptance. Such Certificate shall be prepared within ten (10) business days of satisfying the requirements listed in the Section entitled "Final Pay Request & Affidavit of Release" and shall specify the date of Final Completion, and the entire amount of work performed and compensation earned by the Contractor, including extra work and compensation and approved through the Change Order process.

## 6. FINAL PAYMENT

Final Payment to the Contractor, including retainage, less any amounts due to or claimed by the City, shall not become due until after the City has issued a Certificate of Completion & Final Acceptance and after the Contractor delivers to the City all documentation and other deliverables required per the Contract Documents.

## 7. LIQUIDATED DAMAGES

The City specifies that **time is of the essence** under this Contract.

The City and the Contractor agree that damages for failure to complete the work within the Time of Completion are not susceptible to exact determination but that the damages specified herein is in proportion to the actual loss that the City would suffer from such delay. Therefore, for each calendar day after the specified Time of Completion for the Work that the Contractor has not achieved Final Completion, the City will assess liquidated damages, not as a penalty, applicable to the Contract. The City shall be entitled to deduct liquidated damages against any sums owed by the City to the Contractor. The Contractor hereby waives any defense to the validity of any liquidated damages stated in this Agreement as they may appear on grounds that such liquidated damages are void as penalties or are not reasonably related to actual damages.

When not otherwise specified in the Contract, damage and loss to the City resulting from failure of the Contractor to complete the Work within the specified Time of Completion in this Agreement, plus any extension of time granted, shall be as stipulated and calculated in Section 108.06 (*Failure to Complete on Time*) of the *VDOT Road and Bridge Specifications*.

## 8. WARRANTY

All material provided to the City shall be fully guaranteed by the Contractor against manufacturing defects within the period of the manufacturer's standard warranty. The Contractor shall provide all manufacturers' warranties to the Project Manager by the date of Final Completion. Such defects shall be corrected by the Contractor at no expense to the City.

All work is guaranteed by the Contractor against defects resulting from the use of inferior or faulty materials, or inferior or faulty workmanship, or work not in accordance with the requirements of the Contract Documents for a minimum of one (1) year from the date of Final Acceptance of the work by the City in addition to and irrespective of any manufacturer's or supplier's warranty. No date other than the date of Final Acceptance shall govern the effective date of the Guaranty, unless that date is agreed upon by the City and the Contractor in advance and in a signed writing.

The Contractor shall promptly correct any defective work or materials after receipt of a written notice from the City to do so. If the Contractor fails to proceed promptly or use its best efforts and due diligence to complete such compliance as quickly as possible, the City may have the materials or work corrected and the Contractor and its Sureties shall be liable for all expenses and costs incurred by the City.

Performance and payment bonds shall remain in force during the entire warranty period.

Nothing in this section shall be construed to establish a period of limitations with respect to other obligations the Contractor may have under this Contract.

APPENDIX

**GENERAL PROVISIONS  
CONSTRUCTION PROJECTS**

**DEPARTMENT OF PUBLIC WORKS  
CITY OF FALLS CHURCH**



# CITY OF FALLS CHURCH

**TITLE OF IFB**

**IFB #**  
**ATTACHMENT I**

## **TREE & LANDSCAPE SPECIFICATIONS**

**FOR  
CITY PROJECTS**

**DEPARTMENT OF PUBLIC WORKS  
CITY OF FALLS CHURCH**

November 2015

## TREE & LANDSCAPE SPECIFICATIONS

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## TREE & LANDSCAPE SPECIFICATIONS

### CITY OF FALLS CHURCH DEPARTMENT OF PUBLIC WORKS

#### A. GENERAL STANDARDS & SPECIFICATIONS

All tree and landscape-related work shall be performed in full compliance with the following documents, read together as a single specification:

- ANSI A300, *Tree Care Operations*
- ANSI Z133, *Standards for Safety in Tree Care Operations*
- ANSI Z60, *Standards for Nursery Stock*
- VDOT *Road & Bridge Specifications*, most current edition, Sections:
  - 244.02(a through h) – Materials
  - 602 – Topsoil
  - 603 – Seeding
  - 604 – Sodding

The aforementioned documents, as amended by issuing entities, are hereby incorporated into this contract by reference.

#### B. CITY ARBORIST

The City Arborist shall be notified a minimum of three days in advance of commencing any form of tree or planting work: 703-248-5183 or arborist@fallschurchva.gov.

Per the City's Department of Public Works (DPW) General Provisions for Construction Projects, the City Arborist has the authority to direct and inspect all work and materials used for any landscape planting, tree protection or tree removal, as well as the authority to require additional tree protection measures and mitigation work.

#### C. PROTECTION

##### 1. Description

Existing vegetation, where shown in the construction plans or designated by the City Project Manager, shall be saved and protected throughout construction and through the life of the Contract. Tree Preservation shall consist of any and all measures specified in construction plans to help existing trees survive during construction. These measures may include (but are not limited to): watering, mulching, pruning, fertilizing, control of pests or invasive plants, root padding, root pruning and installation of protective fencing.

##### 2. Prior to Construction

**All required tree work must be completed and tree preservation measures installed before any vehicle or construction equipment may enter the site.** The Contractor's construction foreman, the Contractor's arborist and the City Arborist shall meet to mark the location of the limits of disturbance, tree preservation fencing and root pruning line (where required), erosion control measures, access routes, and areas for storage, concrete wash-out and parking. All tree preservation measures, invasive plant control and tree removal are to be discussed at this time.



### 3. Plant Protection Area (PPA)

- A. No construction equipment may enter the Plant Protection Area (PPA), **before or after the PPA is marked**, except under a temporary access plan approved by the City Arborist.
- B. Plant protection fencing shall be six-foot high chain link fence with 11-gauge mesh. Supports shall be 1 5/8 inch outside-diameter pipes, set at least 2 feet into the ground, no more than 8 feet apart. Temporary fencing set in concrete blocks shall not be used unless absolutely necessary; block locations must be marked on the ground with stakes and paint.
- C. Weatherproof signs at least 8.5" x 11" saying "PLANT PROTECTION AREA: No Entry, No Materials" or equivalent language, shall be placed a maximum of 20 feet apart on the plant protection fencing.
- D. **No vehicles or materials or debris of any kind, nor concrete washouts nor rinse water from any substance shall be allowed inside the Plant Protection Area.** No burning shall be allowed on site.
- E. All erosion and sediment control measures shall be installed outside of the PPA. Devices such as silt fencing, debris basins, and water diversion structures shall be installed to prevent siltation and/or erosion from affecting the PPA.
- F. All underground utilities and drain or irrigation lines shall be routed outside the PPA. If alternative routes are not possible, lines shall be tunneled or bored under the PPA with the approval of the City Arborist.
- G. **The Contractor shall maintain the plant protection fencing in place at all times throughout construction.** The City Arborist must grant approval before any plant protection fencing may be removed, even temporarily.

### 4. Work Within the PPA

- A. **Irrigation for preserved vegetation shall be supplied by the Contractor from early spring until the ground freezes in the fall** when natural rainfall is less than 1 inch per week. Irrigation must be designed to deliver a minimum of 1 inch of water at a time.
- B. All materials to be removed from within the PPA, including trees, brush, debris, pavement, structures or underground features, shall be performed by hand or using equipment operated from outside the PPA. Materials must be lifted out, not skidded across the ground. The City Arborist shall be present during all such operations within the TPA to monitor demolition activity.
- C. Selective tree removal within the PPA will be allowed only under the direction of the City Arborist. The work must be performed by an experienced tree service contractor, not construction workers. Trees to be removed shall be felled in such a way that damage to preserved trees is avoided or minimized.
- D. All tree work contractors are required to have a City of Falls Church annual Tree Contractor license; the most recent list of licensed Tree Contractors is posted on the City's website.
- E. Root pruning, where required, shall be performed outside the PPA by cutting all roots cleanly to a depth of at least 24 inches. Roots shall be cut using a vibrating knife or narrow mechanical trencher with sharp blades, or by manually digging a trench and cutting exposed roots with a saw. Once a trench is opened up, approximately 4" wide,

all exposed roots shall be hand pruned to make clean-cut ends. Pruned roots shall be promptly covered with moist soil.

- F. All pruning on preserved trees must be performed to ANSI A300 and Z133 standards by an arborist certified by the International Society of Arboriculture (ISA), and in accordance with the construction plans and the direction of the City Arborist. Construction workers shall not be allowed to prune trees.
- G. If the City Arborist approves temporary access over the root area of trees to be retained, a roadbed of at least 15 inches of wood chips or crushed rock shall be created and replenished as necessary by the Contractor to protect the soil from compaction.
- H. When the roots of trees designated to be saved are exposed by the Contractor's operation, they shall be wrapped with heavy, moist material, such as burlap or canvas, for protection and to prevent excessive drying. The material shall be kept moist and securely fastened until the roots are covered to finish grade. All material and fasteners shall be removed from the roots before covering.
- I. Fertilizers shall not be applied unless specified in the construction plan or soil tests indicate the need, and shall be applied at the rate indicated by the soil test. Fertilizer products shall be in slow-release granular form, uniform in composition, free flowing, and delivered to the project in original containers with manufacturer labels attached.
- J. Pesticides shall not be applied unless specified in the construction plan or by the City Arborist. All pesticides shall be registered with the Virginia Department of Agriculture and Consumer Services; copies of the MSDS for each product shall be supplied to the City. All materials and applications shall be in accordance with all Commonwealth of Virginia pesticide laws and regulations and be approved by the City Arborist before application. All pesticide applications must be performed by an individual with a valid Virginia Commercial Pesticide Applicator License.
- K. Mulch shall consist of double shredded hardwood, shredded hardwood bark, or arborist wood chips from tree removal and pruning operations only (no tub-grinder chips or hog fuel). Mulch shall be placed where specified on the construction plan, no less than 3 inches and no more than 4 inches deep, and shall be kept 4 inches away from tree trunks.
- L. Wood chips from on-site tree work operations may be spread in vegetated areas of the site if approved by the City Arborist, to a depth of no more than 4 inches, with no chips against tree trunks.

#### 5. At Completion of Project

At the completion of construction (and all equipment has been removed from site), notify the City Arborist for an inspection before removing the plant protection fencing. At this time, all trees will be inspected and any repairs needed will be stipulated by the City and promptly made by the Contractor.

#### 6. Damage to Preserved Vegetation

Refer also to Job Site Damages, in the City of Falls Church's Contract General Provisions.

- A. If damage occurs to any preserved tree during construction, it shall be reported to the City Arborist as soon as possible so that prompt remedial action can be taken. Such repairs, and the replacement in kind of those trees that cannot be satisfactorily repaired, shall be performed at the Contractor's expense.

- B. If due to, or for any reason related to the Contractor's operation, any tree, shrub, ground cover or herbaceous vegetation designated to be saved is destroyed, disfigured, or damaged to the extent that continued life is questionable as determined by the City Arborist, it shall be removed by the Contractor at the direction of the City Arborist. The Contractor will be assessed damages equal to the value of the vegetation as determined in the Guide for Plant Appraisal, Current Edition, published by the International Society of Arboriculture, **plus** the estimated cost of restoration with a similar species.
- C. Damage which may require replacement of vegetation includes torn or broken bark, stripping, broken branches, exposed root systems, cut root systems, poisoned root systems, compaction of surface soil and roots, puncture wounds, drastic reduction of surface roots or leaf canopy, changes in grade greater than 6 inches, or any other changes to the site that may jeopardize the survival or health of the vegetation to be preserved.
- D. Any damage so assessed will be deducted from the monies due or that may become due the Contractor.

#### D. TREE & STUMP REMOVAL

##### 1. Description

This work shall consist of the selective removal and disposal of trees, stumps and woody debris on construction projects. Stumps to remain shall be treated with an approved herbicide to prevent sprouting.

##### 2. Materials

Herbicides used shall be registered with the Virginia Department of Agriculture and Consumer Services; copies of the MSDS for each product shall be supplied to the City. All materials and applications shall be in accordance with all Commonwealth of Virginia pesticide laws and regulations and be approved by the City Arborist before application. All pesticide applications must be performed by an individual with a valid Virginia Commercial Pesticide Applicator License.

##### 3. Procedures

- A. Trees to be removed shall be clearly marked and approved by the City Arborist prior to demolition or entry of any equipment on site.
- B. The Contractor's tree removal operations shall not damage trees and shrubs that are to remain (including off-site trees). If roots are entwined, the City Arborist may require root pruning before commencing tree removal. Tree removal within 50 feet of a tree to remain must be performed by an experienced tree service contractor, not construction workers.
- C. All tree work contractors are required to have a City of Falls Church annual Tree Contractor license; the most recent list of licensed Tree Contractors is posted on the City's website.
- D. Stumps and any visible surface roots shall be ground to a depth of at least 18 inches. Stump chips shall be hauled away and the resulting depression filled with Class A or B Topsoil conforming to VDOT 244.02(b), compacted to match the surrounding soil.

- E. Where the construction plan calls out stumps to remain, they shall be cut not higher than 4 inches above the ground unless otherwise specified on the plan. Stumps of living trees and shrubs shall be coated with a herbicide solution within 48 hours after they are cut. The exposed surface of stumps and exposed live roots shall be saturated with herbicide to the point of runoff.
- F. Woody plant debris shall be disposed of by either hauling from the site or chipping. Wood greater than 6 inches in diameter shall be disposed of as saw logs, pulpwood, firewood or other usable material. Chips may be spread in vegetated areas of the site if approved by the City Arborist, to a depth of no more than 4 inches, with no chips against tree trunks.

#### 4. Damage to Preserved Vegetation

- A. Any damage to remaining trees due to tree removal activities shall be reported to the City Arborist as soon as possible so that prompt remedial action can be taken.
- B. If due to, or for any reason related to the Contractor's operation, any tree, shrub, ground cover or herbaceous vegetation designated to be saved is destroyed, disfigured, or damaged to the extent that continued life is questionable as determined by the City Arborist, it shall be removed by the Contractor at the direction of the City Arborist. The Contractor will be assessed damages equal to the value of the vegetation as determined in the Guide for Plant Appraisal, Current Edition, published by the International Society of Arboriculture, plus the estimated cost of restoration with a similar species.
- C. Damage which may require replacement of vegetation includes torn or broken bark, stripping, broken branches, exposed root systems, cut root systems, poisoned root systems, compaction of surface soil and roots, puncture wounds, drastic reduction of surface roots or leaf canopy, changes in grade greater than 6 inches, or any other changes to the site that may jeopardize the survival or health of the vegetation to be preserved.
- D. Any damage so assessed will be deducted from the monies due or that may become due the Contractor.

### E. PLANTING SPECIFICATIONS

#### 1. Description

This work shall consist of furnishing and installing plant material as indicated on the construction plans, including all labor, materials, plants, equipment, incidentals, and clean-up.

#### 2. General Workmanship

- A. During installation of trees and shrubs, all work areas shall be kept neat, clean and free of all trash and debris, and all reasonable precautions shall be taken to avoid damage to existing plants, turf, structures, and private property.
- B. The Contractor shall be responsible for removal and disposal off-site of all trash, excess backfill and any materials incidental to the project.

#### 3. Plant Materials

- A. The Contractor shall acquire plant materials from certified nurseries that have been inspected by state and/or federal agencies.

- B. All plant materials shall conform to the American Standard for Nursery Stock, ANSI Z60 latest edition, published by American Hort. **Pay particular note to the fact that all trees must have their root crowns visible at or near the soil surface**, and that circling roots are not acceptable. Plants that do not meet all elements of ANSI Z60 will be rejected.
  - C. All plant materials shall bear nursery tags indicating the genus, species and if applicable, cultivar or variety. The Contractor shall remove all tags after the City Arborist has inspected and approved the plant material.
  - D. The Contractor and her/his suppliers shall keep all plant materials damp and protected from damage, sun, wind and temperature extremes during transport. Plants shall be handled by their root balls or containers only.
  - E. All plant materials must pass inspection by the City Arborist prior to planting. The Contractor shall phone at least three days prior to installation to schedule inspections.
  - F. Substitutions in plant material or sizes specified will not be accepted unless approved by the City Arborist prior to delivery.
4. Other Materials
- A. Unless otherwise specified, imported topsoil shall meet the specifications of VDOT *Road & Bridge Specifications* Section 244.02(b).
  - B. Fertilizers, if required, shall be formulated to supply required elements as indicated by soil testing. Fertilizer products shall be in slow-release granular form, uniform in composition, free flowing, and delivered to the project in original containers with manufacturer labels attached.
  - C. Unless otherwise specified in the construction plans, compost shall consist of decomposed vegetable matter which has been composted to support bacterial cultures. Such compost shall not contain live plant seeds or plant disease organisms.
  - D. Unless otherwise specified in the construction plans, mulch shall consist of double shredded hardwood, shredded hardwood bark, or arborist wood chips from tree removal and pruning operations only (no tub-grinder chips or hog fuel). Mulch shall be placed as specified on the construction plan, no less than 3 inches and no more than 4 inches deep, and shall be kept 4 inches away from tree trunks.
5. Planting Schedule
- A. The Contractor shall not begin soil or planting work until all construction is finished and all irrigation work is complete and approved.
  - B. Planting operations shall be performed during periods within the planting season when weather and soil conditions are suitable and in accordance with accepted local practice. The Contractor shall not install plants in soil that is muddy or frozen.
  - C. Planting season dates:
    - 1. Deciduous Trees – March 1 to May 30 or September 1 to December 15.
    - 2. Evergreen Trees – March 1 to May 15 or September 1 to November 15.
    - 3. Other Plants: March 1 to December 15.

- D. Plant material shall be planted on the day of delivery if/when practical. In the event that this is not possible, the Contractor shall keep plants damp and protect them from damage, sun, wind and temperature extremes until they are planted. Any plants not installed within three days after delivery shall be rejected, unless the City Arborist and Contractor provide otherwise by written agreement.
6. Seeding and Sodding
- A. Seeding shall follow VDOT *Road & Bridge Specifications*, Section 603.
  - B. Sodding shall follow VDOT *Road & Bridge Specifications*, Section 604.
7. Prior to Planting
- A. Soil shall be prepared, and topsoil applied if specified in the construction plans, following VDOT *Road & Bridge Specifications*, Section 602.03(b & c).
  - B. If soils are compacted in a planting area, the Contractor shall spread six inches of compost over the area and till to a depth of eighteen inches. The Contractor shall not add sand, and shall not till within a tree preservation area.
  - C. The Contractor shall have the soil fertility tested at an accredited laboratory and submit the results to the City Arborist prior to installing plant material. Only if needed, the Contractor shall supply and apply fertilizer at the rate indicated by the soil test.
  - D. If the soil drains at a rate less than one inch per hour, the Contractor shall install drainage to carry water away from bottom of the planting hole, or move or raise the planting site (berm construction).
  - E. The Contractor shall verify existing conditions and utility locations before digging planting holes or planting beds. The City of Falls Church may require the Contractor to stake the locations of individual plants within the approved planting areas.
  - F. The City Arborist must approve plant material location adjustments from the construction plans prior to planting.
8. Planting Procedure
- A. Remove any excess soil from the top of the soil ball so that the top of the root flare is exposed and the top of the ball is as level as possible.
  - B. Dig tree and shrub planting holes a minimum of two and a half times the width of the root ball and no deeper than the height of the root ball.
  - C. Remove all ropes, ties and tags from trees and shrubs to prevent girdling branches and trunks.
  - D. **Plant trees and shrubs at the height of the surrounding grade. Root flares must be visible at or barely above the final soil surface.**
  - E. Pruning at the time of planting shall be done only to remove dead or damaged branches or co-dominant leaders.
  - F. Balled and burlapped plants: Remove pinning nails and rope lacing, remove the top 12" of the wire basket, then cut away the wrapping.
  - G. Container plants: Remove the container completely. Using a sharp tool, **cut the outer 1 inch off from the entire root/soil ball to remove any small circling roots.**

- H. Backfill planting holes with soil only. Do not add fertilizer or organic matter such as peat moss into the backfill. Do not add gravel or sand. When half of the soil has been returned to the planting hole, use water to settle soil and eliminate air pockets. Water again after the remaining soil has been placed.
- I. Form a three-inch rim of soil around the planting holes for individual trees in turf areas, to hold water and mulch.
- J. Plant perennials at the same depth they were in the containers. For bare root perennials, plant with the soil even with the top of the root crown. Dig the hole wide enough to allow the roots to spread out in the soil. Push the soil back into the hole over the roots and use water to settle the soil.
- K. Stake trees only where requested by the City Arborist, in areas of high traffic or highly windy locations. Unless otherwise specified, pound three six-foot stakes at least two feet into the ground outside the root ball. Use plastic chain lock tie or fabric straps that won't damage the bark, and allow trees 2-3 inches of flex. Place the ties at 1/3 of the tree's height. Remove all staking material after one year.
- L. Use tree wrap only if specified by the City Arborist. In these instances use white wrap, attaching without the use of wire, rope or ties, and remove after one year.
- M. The Contractor shall supply and place mulch as specified on the construction plan. For trees and shrubs, place mulch no less than 3 inches and no more than 4 inches deep, and keep it 4 inches away from tree trunks. For perennials, place mulch no more than 2 inches deep.

#### 9. Prior to Acceptance

Upon the completion of all planting work and before final acceptance, the Contractor shall remove all material, equipment and debris resulting from his work. All paved areas shall be broom cleaned and the site left in a neat and acceptable condition as approved by the City Arborist.

#### 10. Warranty of Plant Material

- A. The Contractor shall warranty (guarantee) all plant material to be in vigorous growing condition at planting, and shall guarantee plant growth for at least one year from the date of final acceptance of the planting. If any plants die or fail to flourish within that year, replacements shall be made at the beginning of the first succeeding planting season.
- B. During the Warranty Period, the Contractor shall maintain all plantings as required for healthy growth. This work shall include watering when natural rainfall is less than 1 inch per week; controlling weed growth; mowing turf areas; restoring planting saucers and mulch; repairing stakes and guy supports; resetting plants to proper grades or vertical position as required; and pest control as required to keep plants healthy.