INVITATION FOR BID

IFB 24-26

SIDEWALK IMPROVEMENTS AT COURTHOUSE RD. SW AND AT PLEASANT ST. NW

Town of Vienna

127 Center Street S

Vienna, VA 22180

RELEASE DATE: June 5, 2024

DEADLINE FOR QUESTIONS: June 17, 2024

RESPONSE DEADLINE: June 28, 2024, 2:00 pm

RESPONSES MUST BE SUBMITTED ELECTRONICALLY TO:

https://procurement.opengov.com/portal/viennava

Town of Vienna
INVITATION FOR BID
Sidewalk Improvements at Courthouse Rd. SW and at Pleasant St. NW

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Attachments:

A - Courthouse Rd Construction Plans

B - Pleasant St Construction Plans

C - 24-26 Attachments- Details, Specs

1. Posting Notice

1.1. Summary

All times listed in this IFB are Eastern Standard Time.

Bids shall be submitted electronically via the Town of Vienna's eProcurement Portal

The Town uses eVA and OpenGov for notification and distribution of solicitation documents.

Current solicitations can be viewed and downloaded here:
https://procurement.opengov.com/portal/viennava

To log in or to register your company (for free) so that you receive notifications of the Town's solicitations, go to the Town's eProcurement Portal On the registration form, enter the required information. Please remember to add your commodity/NIGP codes for the type of work that you perform. Select all that apply or are similar in nature.

Solicitations also are advertised on the Commonwealth of Virginia's eVA Procurement Portal, where they may be downloaded and viewed in their entirety.

The Town of Vienna reserves the right to reject any and all bids or to accept the bid(s) which, in its judgment, will be for its best interest.

NO BID MAY BE WITHDRAWN FOR A PERIOD OF SIXTY (60) DAYS SUBSEQUENT TO THE DATE OF THE BID OPENING.

Any bid may be withdrawn PRIOR to the scheduled time for bid opening or authorized postponement thereof.

A public bid opening will take place (on the bid due date) in the purchasing office located on the lower level at Town Hall - 128 Center St. South, Vienna, VA 22180.

1.2. Background

Located in Northern Virginia and approximately 14 miles from Washington D.C., the Town of Vienna is an incorporated town within Fairfax County—adjacent to Tysons Corner (Northeast), Oakton and Fairfax City (Southwest), Merrifield/Mosaic District (Southeast) and Reston (Northwest). The Town is 4.4 square miles and home to approximately 16,473 residents.

Vienna is primarily a residential community with at least 71 percent of the land developed for residential purposes, excluding rights-of-way. The Town has approximately 3.5 million square feet of commercial and industrial space—60 percent is used for professional office space, 30 percent of the space is used for retail, and the remaining 10 percent is used for industrial purposes.

1.3. Contact Information

Jerry Amacker
Procurement Officer
127 Center Street South
Vienna, VA 22180

Email: jerry.amacker@viennava.gov
Phone: (703) 255-6359

Department:
Department of Public Works

Department Head:
Brad Baer
Director

1.4. Timeline

Release Project Date	June 5, 2024
Question Submission Deadline	June 17, 2024, 2:00pm
Proposal Submission Deadline	June 28, 2024, 2:00pm

2. Section A - Information for Bidders

Information or Bidders

2.1. Submission of Bids and Bid Opening

A. Bids will be received by the Town of Vienna, Virginia (Town) and will be opened and read at 2:00 pm on Friday, June 28, 2024. Pre-qualified bidders, or their representative, and other interested persons may be present at the opening of proposals.

B. Bidders must submit their bids via the Town's eProcurement Portal. All bids must show unit price, if applicable, and total price. All bidders must acknowledge all issued addenda via the Town's eProcurement Portal. The bidder acknowledges they have read this solicitation, understand it, and agree to be bound by its terms and conditions. Bids shall be submitted via the Town's eProcurement Portal.

C. The Bidder shall assume full responsibility for timely upload of their bid to the OpenGov Procurement Portal. The OpenGov Procurement Portal does not allow late bids.
Bidders are reminded that changes to the IFB, in the form of addenda, are often issued between the issue date and within three business (3) days before the closing of the IFB. Bidders are solely responsible for checking the Town website to insure that they have the most current information regarding the IFB.

2.2. Bidding Documents

A. Bidding Documents include the Bid Table, SCC, Bid Bond and Addenda issued prior to receipt of bids. All requirements and obligations of the Bidding Documents are hereby incorporated by reference into the Contract Documents and are binding on the Successful Bidder upon Award of the Contract.

B. Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement for Bid in the number and for the price, if any, stated therein.

C. Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor the A/E shall assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

D. The Owner in making copies of the Bidding Documents available on the above terms does so only for the purpose of obtaining Bids on the Work and does not confer a license or grant for any other use.

2.3. Definitions

A. THE BID: A Bid is a complete and properly signed proposal to do the Work or designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.

B. BASE BID: The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which work may be added or from which work may be deleted for sums stated in Alternate Bids, if any.

C. ALTERNATES: An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

2.4. Qualification of Bidder

A. The Successful Bidder shall perform at least that percentage of the Work specified in Article 7 of the Owner-Contractor Agreement, with forces that are in the direct employment of the Contractor's organization. If requested by the Owner, prior to the signing of the contract, the successful Bidder shall submit a statement of work to be performed by their own forces.

B. Prior to Contract award or within seven (7) days of the Owner's request to do so, the successful Bidder shall be prepared to demonstrate that their present organization, direct labor force and prior work experience is of adequate size and development to maintain responsible control of the project and to schedule, coordinate and perform the Work in an expeditious manner and in accordance with the Contract Documents.

C. Bidders, whether residents or nonresidents of Virginia, will be required to show evidence of a certificate of registration as required by Chapter 11 of Title 54.1 of the Code of Virginia before their bids will be considered. If a bid is $70,000 or more, or if the Contractor's annual volume is $500,000 or more, the Contractor must be licensed as a "Class A Contractor". If a bid is $7,500 or more but less than $70,000, the Contractor must be licensed as at least a "Class B Contractor".

D. The Owner will consider, in determining the qualifications of a Bidder, their record in the performance of any contracts for the construction work into which they may have entered with the Town or with such public bodies or corporations. The Owner expressly reserves the right to reject the bid of any Bidder if such record discloses that such Bidder, in the opinion of the Owner, has not properly performed such contracts or has habitually and without just cause neglected the payment of bills, or has otherwise disregarded their obligations to subcontractors, material men, suppliers or employees.

E. The Owner may make such investigation as they deem necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to the Owner all such information and data for their purpose as they may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of such Bidder, fails to satisfy the Owner that such Bidder is a responsive and responsible Bidder in accordance with the criteria set forth herein. Conditional bids will not be accepted.

2.5. Bidder's Representations

Each Bidder, by submitting their Bid, represents that:

A. They have read and understands the Bidding Documents and his Bid is made in accordance therewith; and Bidder agrees to be bound by the terms and requirements set forth in the Bidding and Contract Documents;

B. They have visited the site, has familiarized themself with the local conditions under which the Work is to be performed and has correlated his observations with the requirements of the proposed Contract Documents;

C. Their Bid is based upon the materials, systems and equipment required by the Bidding Documents without exception; and

D. They have the capability, in all respects, and the moral, ethical and business integrity, reliability, technical ability, financial resources, plant, management, superintendents, equipment, and materials which will assure effective and efficient good faith performance in full compliance with the Contract Documents and with any and all schedules and Milestone and Completion dates required by the Owner. The Bidder acknowledges and represents that he has made allowances for normal inclement weather indigenous to the Project Site, in their estimating, planning and scheduling of the Work. The Bidder further acknowledges that the Contract Documents are, in their opinion, appropriate and adequate for completing this project and for the construction of sound and suitable Work. The Bidder hereby certifies that the Work shall be completed, in place, in full accordance with the Contract Documents, within the time limits specified.

2.6. Bid Security

A. Each bid must be accompanied by (1) cash; or (2) a Cashier's Check or a Certified Check of the Bidder made payable to the Town of Vienna; or (3) a bidder's bond on the Bid Bond Form provided herein or on a similar form which in every respect materially complies with said Bid Bond form. The amount of this bid security will be 2½% of the bid amount for bids of $100,000 or less, and 5% of the bid amount for bids greater than $100,000. For purposes of this provision, the amount of the bid shall be the Base Bid plus all positive amount alternates. The bidder's bond shall be issued by a surety company licensed to conduct business in Virginia and acceptable to the Owner.

B. Said bid security is given as a guarantee that the Bidder will enter into a contract if awarded the Work and, in the case of refusal or failure to so enter into said contract, the security shall be declared forfeited to the Owner. Such security shall be returned to all but the three lowest Bidders within three days after the opening of bids and the remaining security will be returned within 48 hours after the Owner and the successful Bidder have executed the Contract. If no Contract has been awarded or the Bidder has not been notified of the acceptance of their bid, within forty-five (45) days of the bid opening, the Bidder may withdraw their bid and request the return of their bid security. If, at the Owner's request, the Bidder agrees to extend and maintain their bid beyond the specified 45 days, their bid security will not be returned.

C. The Bidder's Cash, Certified or Cashier's Check or Bid Bond shall be accompanied by a written guarantee by a surety company licensed to do business in Virginia and acceptable to the Owner, that in the event a contract is awarded to the Bidder, said surety will furnish the required Performance, Labor and Material Payment and Guarantee Bonds, as required herein.

2.7. Liquidated Damages

The Successful Bidder, upon their failure or refusal to execute the Contract within fifteen (15) days after they have received notice of the acceptance of their bid, shall forfeit to the Owner the security deposited with their bid, as liquidated damages for such failure or refusal.

2.8. Site Conditions and Conditions of Work

A. Each Bidder must acquaint themself thoroughly as to the character and nature of the Work to be done. Each Bidder furthermore must make a careful examination of the site of the Work and inform himself fully as to the difficulties to be encountered in the performance of the Work, the facilities for

delivering, storing and placing materials and equipment, and other conditions relating to construction and labor.

B. Except where subsurface and/or latent conditions at the site are determined in accordance with Section D, 5.5 (1) of the General Conditions to be materially different than those shown on the drawings or indicated in the contract documents, the Successful Bidder, assumes all risk as to the nature and behavior of the soil or subsurface conditions which underlie the Work or is adjacent thereto, or difficulties that may be due to any unfavorable conditions that may be encountered in the Work, whether apparent on surface inspection or disclosed after construction begins.

C. No plea of ignorance of conditions that exist prior to submission of bids, or may hereafter exist on the site of the Work subsequent to the Notice to Proceed, or difficulties that may be encountered in the execution of the Work, as a result of failure to make necessary investigations and examinations, will be accepted as an excuse for any failure or omission on the part of the successful Bidder to fulfill in every detail all the requirements of the Contract Documents and to complete the Work for the consideration set forth therein, or as a basis for any claim whatsoever.

D. Insofar as possible, the Successful Bidder, in carrying out his Work, must employ such methods or means as will not cause interruption of or interference with the Work of the Owner or any separate contractor.

2.9. Bidder's Questions, Addenda and Interpretations

A. Bidders and Sub-bidders shall promptly notify the Owner of any ambiguity, inconsistency or error which they may discover upon examination of the Bidding and Contract Documents or of the site and local conditions. No interpretation of the meaning of the drawings, specifications or other contract documents will be made to any Bidder orally.

B. Every request for such interpretation should be in writing and submitted through the Town's eProcurement Portal Q&A function or emailed to jerry.amacker@viennava.gov. To be given consideration must be received by 2:00 pm on Monday, June 17, 2024

C. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the Bidding Documents which, if issued, will be via the Town’s eProcurement Portal in the same location as the bid documents, no later than three (3) calendar days prior to the date fixed for the opening of bids. The Owner will not be responsible for any other explanations or interpretations of the proposed documents. Failure of any Bidder to receive any such addendum or interpretation shall not relieve any Bidder from any obligation under their bid as submitted. All addenda so issued shall become part of the Contract Documents.

D. If the Bidder (or any person bidding to Bidder and/or subsequently in contract with the Bidder, relating to the subject project) knows, or should have known, that an ambiguity, discrepancy, error, omission or conflicting statement exists in the Bidding or Contract Documents, said Bidder (or sub-bidder) has an obligation to seek a clarification thereof from the Owner prior to bid. The Owner will welcome such a clarification request, and, if deemed necessary by the Owner, the Owner will issue a written addendum clarifying the matter in question. Should the Bidder fail to seek such a clarification prior to bid, Bidder thereby assumes the risk of loss related to such ambiguity, discrepancy, error, omission or conflicting statement which the Bidder (and any person bidding to Bidder and/or

subsequently in contract with Bidder, relating to the subject project) knew or should have known existed at the time of bid.

E. Each Bidder shall ascertain prior to submitting their bid that they have received all Addenda issued, and they shall acknowledge receipt of said addenda during the bid submittal process in OpenGov.

2.10. Performance and Payment Bond

The following bonds or surety shall be delivered to the Procurement Officer within ten (10) days of notification of award and PRIOR to the commencement of any work and shall become binding on the parties upon the execution of the Contract:

A performance bond satisfactory to the Town, executed by a surety company authorized to do business in Virginia or otherwise secured in a manner satisfactory to the Town, for the faithful performance of the Contract in strict conformity with the plans, specifications and conditions of the Contract Documents. The bond shall be in an amount equal to 100% of the price specified in the contract; and a payments bond satisfactory to the Town, executed by a surety company authorized to do business in Virginia or otherwise secured in a manner satisfactory to the Town, for the protection of all persons supplying labor and material to the contractor or its subcontractors for the performance of the work provided for in the Contract Documents. Labor and materials shall include public utility services and reasonable rentals of equipment, but only for the periods when the equipment rented is actually used at the site. The bond shall be in an amount equal to 100% of the price specified in the contract.

A prime contractor shall not be precluded from requiring each subcontractor to furnish a payment bond with surety thereon in an amount equal to 100% of the contract with such subcontractor.

2.11. Time for Completion and Liquidated Damages for Non-Completion

The time for completion of this Contract and liquidated damages for non-completion within the stipulated time shall be as fixed in the Owner-Contractor Agreement.

2.12. Location of Work

The site of the proposed Work may vary between public and private land or be situated on a combination of the two property types. Site locations may include public streets, easements and/or other right-of-ways, as shown on the drawings.

2.13. Liability Insurance and Workmen's Compensation

The Successful Bidder will be required to carry public liability and workmen’s compensation and other insurance in the amounts and under the terms stipulated under Section 5.47 of the General Conditions.

2.14. Bidders Referred to Laws

A. The attention of Bidders is called to the provisions of all Municipal, County and State laws, regulations, ordinances and resolutions, including but not limited to, the Virginia Human Rights Act; the Equal Opportunity, Small and Minority Business Enterprises and the Construction Safety Resolutions; as well as laws, regulations, ordinances, resolutions and permits relating to obstructing streets, maintaining signals, storing and handling of explosives, or affecting the Bidder, or their employees or their Work hereunder in their relation to the Owner or any other person. The Bidder shall obey all such laws,

regulations, ordinances, permits or resolutions controlling or limiting Contractors while engaged in the prosecution of Work under this Contract.

B. The provisions of this Contract shall be interpreted in accordance with the laws of Virginia and in accordance with the laws, ordinances, regulations, permits and resolutions of the Town of Vienna.

2.15. Taxes

All applicable Federal, State and Local Taxes shall be included in the Bidder's proposal.

2.16. Right to Reject Bids

The Owner expressly reserves the right to reject any or all bids, to waive any informalities or irregularities in the bids received, and to accept that bid which in its judgment, best serves the interest of the Owner.

2.17. Equal Products and Substitutions

A. Unless otherwise provided in the Contract Documents, the naming of a certain brand, make, manufacturer or article, device, product, material, fixture, form or type construction by name, make or catalog number, shall convey the general style, type, character and standard of quality of the article desired and shall not be construed as limiting competition. Any Bidder, in such cases, may, with Owner approval, use any article, device, product, material, fixture, form or type of construction which in the judgment of the A/E and Owner is equal to that specified considering quality, workmanship, economy of operation, suitability for the purpose intended, and acceptability for use on the project. Approval by the Owner prior to bid opening will be in the form of an Addendum to the Specifications issued to all prospective Bidders indicating that the additional makes or brands are equivalent to those specified.

B. Equal Products and Substitutions Prior to Bid Opening

1. To obtain such approval on makes or brands of material other than those specified in Contract Documents, the Bidder shall submit their requests with adequate supporting technical data, as required below, via the Town's eProcurement Portal Q&A feature by 2:00 pm on Monday, June 17, 2024.
2. The Bidder's request for approval of any equal product or substitution shall include:

a. Itemized comparison of proposed equal product or substitution with product or method specified;
b. Product identification, including manufacturer's name, street address, email address if applicable and phone number;
c. Manufacturer's literature showing complete product description, performance and test data, and all reference standards;
d. Samples and colors in the case of articles or products;
e. Name and address of similar projects on which the product was used and date of installation;
f. For construction methods, include a detailed description for proposed method and drawings illustrating same, and
g. A certification form, notarized prior to bid, entitled "Bidder's Request for Equal Product or Substitution and Bidder's Representations", contained in the Form of Bid. If approved by an Addendum, said form shall be resubmitted by the Bidder and all other Bidders that desire to use the same product or substitution in their Bid packages, at the time of bid.

C. The decision of the Owner regarding the approval of items as equal products or substitutions will be final.

D. No change in brand or make from the originally specified item or approved equal product or approved substitution will be permitted unless satisfactory written evidence is presented to the A/E and approved by the Owner that the manufacturer cannot make scheduled delivery of the approved item.

E. The Bidder may request approval for equal products or substitutions after award of the Contract in accordance with the provisions of Article 4 of the General Conditions.

F. Equal products or substitutions will not be considered for approval by the Owner prior to or after award of the Contract if acceptance of the proposed equal product or substitution will require substantial design revisions to the Contract Documents or is otherwise not acceptable to the Owner or A/E.

G. Equal products or substitutions will not be considered for approval by the Owner after award of the Contract if the proposed item is indicated or implied on shop drawings or product data submittals and has not been formally submitted for approval by the Bidder in accordance with the above-stated requirements.

H. Bidders, other than the bidder who requested a particular equal product or substitution, that choose to utilize that equal product or substitution, as approved by addendum, shall comply with the submittal requirements of Article A-17 subparagraph B.2.g herein. All provisions herein and in the General Conditions regarding the use of said equal product or substitution shall apply to all Bidders who choose to utilize said equal product or substitution.

2.18. Preparation and Submittal of Bid Form

A. Bids shall be submitted via the Town's eProcurement Portal, and shall be complete in every respect. The total bid amount shall be entered in the appropriate spaces provided. Where applicable, the unit price or lump sum items, and their extensions, shall be entered in figures in the respective columns provided for each bid item. All entries shall be made in the Bid Table section of the eProcurement Portal. A failure to comply with this requirement may be cause for disqualification of the bid.

B. For Unit Price bids, in the event of any discrepancies between the unit prices and the extensions thereof or the total bid amount, the unit prices shall govern. Quantities listed in the Bid Form are an estimation of work only and not a guarantee. Quantities may be greater or less than stated in any given year.

C. Bids shall not contain any restatement or qualifications of Work to be done. Alternate bids will not be considered unless specifically called for. No oral, telegraphic or telephonic bids, or modifications will be considered.

D. Bidder shall complete the Vendor Questionnaire in its entirety.

2.19. Modification or Withdrawal of Bid

A. A Bidder may withdraw his bid from consideration if the price bid was substantially lower than the other bids due solely to a mistake therein, provided the bid was submitted in good faith, and the

mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of Work, labor or material made directly in the compilation of a bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original Work papers, documents and materials used in the preparation of the bid sought to be withdrawn. The Bidder shall give notice in writing of his claim of right to withdraw his bid within two (2) business days after the conclusion of the bid opening procedure and shall submit original Work papers with such notice.

Work papers, documents, and materials submitted in support of a withdrawal of bids may be considered as trade secrets or proprietary information.

B. Prior to the time and date designated for receipt of bids, any bid submitted may be modified or withdrawn by notice to the party receiving bids at the place designated for receipt of bids. Such notice shall be in writing over the signature of the Bidder.

C. Withdrawn bids may be resubmitted up to the time designated for the receipt of Bids provided that they are then fully in conformance with this Information for Bidders.

D. Bid security, if any is required, shall be in an amount sufficient for the bid as modified or resubmitted.

E. A decision denying withdrawal of bid pursuant to Article A-19A herein shall be final and conclusive unless the Bidder institutes legal court action within ten (10) days after receipt of the decision.

F. If it is determined by the Courts that the decision refusing withdrawal of the bid was arbitrary or capricious, the sole relief shall be withdrawal of the bid and return of their bid security.

2.20. Nonconforming Terms & Conditions

If the bidder submits alternate terms and conditions with the bid that do not conform to the terms and conditions in this solicitation, the bid is subject to rejection as non-responsive. The Town reserves the right to permit the bidder to withdraw nonconforming terms and conditions from its bid prior to a determination by the Town of non-responsiveness as a result of the submission of nonconforming terms and conditions.

2.21. Exceptions

Bidders taking exception to any part or section of this solicitation, including, by way of illustration and limitation, the Specifications, General Terms and Conditions, the Special Conditions, and any attachments or references hereto, shall indicate such exceptions on the Bid Forms. Failure to indicate any exceptions shall be interpreted as the bidder's intent to fully comply with the solicitation as written. However, conditional or qualified bids with such exceptions, unless specifically allowed in the solicitation, are subject to rejection in whole or in part as non-responsive.

2.22. Construction Safety

A. It shall be required that each bid submitted to the Town for a contract for construction, alteration, and/or repairs, including painting or decorating of a building, highway, street, bridge, sidewalk, culvert, sewer, excavation, grading, or any other construction, include a list of all the following actions which have become final in the three years prior to the bid submission:

1. Willful violations, violations for failure to abate, or repeated violations, for which the bidder was cited by (a) the United States Occupational Safety and Health Administration; (b) the Virginia Department of Labor and Industry; or (c) the occupational safety and health plan for any other state; or

2. Three (3) or more serious construction safety violations for which the bidder was cited by the (a) United States Occupational Safety and Health Administration; or (b) the Virginia Occupational Safety and Health Administration; or (c) the occupational safety and health plan from any other state.

3. Termination of a contract between the Contractor and the Town by the procurement officer or their designee for safety violations.

If the bidder has not received or been the subject of any such violations in the three (3) years prior to the bid submission, then the bidder shall so indicate by certification on the bid form entitled Certification of Safety Violations. The bidder will also indicate on this form each state in which Work was performed in the three (3) years prior to the bid submission.

B. No Town construction contract, as discussed above, may be bid on by any bidder or contractor who has been the subject of any citations for the type and number of violations listed in aforementioned paragraph A, which have become final within the three (3) years prior to the bid submission.

1. Notwithstanding the language of paragraph B, above, any bidder or contractor who has been the subject of a violation, as described heretofore in paragraph A, which has become final in the three (3) years prior to the bid submission, may bid, after a mandatory twelve (12) months from the date the violation became final, if the bidder or contractor meets the eligibility criteria set forth in paragraph D, below.

2. Notwithstanding the language of paragraph B, above, any bidder or contractor who has been the subject of the type and number of violations as described in paragraph A(2), which have become final within three (3) years prior to bid submission, may bid, after a mandatory waiting period of twelve (12) months from the date the last such violation became final, if the bidder or contractor meets the eligibility criteria in paragraph D, below.

3. Notwithstanding the language of paragraph B, above, any bidder or contractor who has previously been terminated from a Town contract, as described in paragraph A(3), within three (3) years prior to the bid submission, may bid, after a mandatory waiting period of twelve (12) months from the date of termination, if the bidder or contractor meets the eligibility criteria in paragraph D, below.

C. Prior to bidding on a project, under the provisions of paragraph B, above, a Contractor may request that a determination be made by the Town, regarding its eligibility to submit a bid on a contract under the terms of this resolution. However, this request for determination and any subsequent adjudication process must be completed prior to submitting a bid on any project and the request for determination must be received no later than twenty-one (21) days before bids are due unless otherwise stated in the Advertisement for Bid.

D. The criteria used by the Town in reviewing the corrective action taken by a bidder or Contractor to prevent the recurrence of safety violations shall include but not be limited to the following:

- Does the firm have an established safety program? If so, how long has it been in existence?

- Does the firm incorporate safety and health related issues into their new employee orientation programs?
- Does the firm include work safety as a part of an employee's performance evaluation?
- To what degree does senior/corporate management support safety related matters? Does the firm have a safety policy statement signed by a member of senior/corporate management?
- Does the firm have a full time Safety Manager? Does this person report to a high level, authoritative position within the Company?
- Are safety inspections conducted at work sites? If so, how often & by whom?
- Are safety training programs conducted for employees? If so, how often and by whom?
- Are safety meetings conducted on site by the firm? If so, how frequently?
- Does the firm have a visibly active safety committee? If so, how often does it meet? Who serves on the committee?
- Is the firm an active member of a recognized construction safety organization in the Washington Metropolitan area, or in the state of contractor's domicile?
- What is the firm's Workers Compensation Experience Modification Factor? Are there any evident trends?

The determination rendered by the Town shall be final unless it is appealed in accordance with the provisions of the solicitation.

E. It shall be a condition of each Town construction contract, as discussed above, that no Contractor or Subcontractor contracting for any part of the contract Work shall require any laborer, mechanic, or other person employed in the performance of the contract to work in surroundings or under working conditions which are hazardous or unnecessarily dangerous to their safety as determined under construction safety standards promulgated by the U.S. Department of Labor or the Virginia Department of Labor and Industry.

F. No contractor awarded a Town construction contract shall knowingly employ or contract with any person, company, or corporation for services pursuant to that contract if such person, company or corporation could not have been awarded such contract due to the restrictions in paragraph B, above.

2.23. Award of Contract

Award may be made in the aggregate or separately for each PART identified in the Pricing Schedule. The Town reserves the right to award the contract in the aggregate, or by PART, and/or to make a Primary and Secondary and Tertiary award in the aggregate, or separately per PART, depending upon what the Town determines to be in its best interest.

A. The Procurement Officer or their designee, shall have the authority to waive informalities in bids, reject all bids, parts of all bids, or all bids for any one or more goods or services included in a solicitation

when in their judgment the public interest may be served thereby. If separate bids are received for the same total amount or unit price (including authorized discounts and delivery times) and if the public interest will not permit the delay of re-advertisement for bids, the Procurement Officer or their designee, is authorized to award that is deemed to be in the best interest of the Town of Vienna.

B. The Lowest Bidders are determined by the aggregate amount of the unit prices set forth in the Form of Bid or the aggregate amount of the Base Bid, plus any Alternates selected by the Owner.

C. A Responsive Bidder shall mean a Bidder who has submitted a Bid which conforms, in all material respects, to the Bidding Documents.

D. A Responsible Bidder shall mean a Bidder who has the capability, in all respects, to perform fully the Contract requirements and the moral, ethical and business integrity and reliability which will assure good faith performance. In determining responsibility, the following criteria will be considered:

1. The ability, capacity and skill of the Bidder to perform the contract or provide the service required;
2. Whether the Bidder can perform the contract or provide the service promptly, or within the time specified, without delay or interference;
3. The character, integrity, reputation, judgment, experience and efficiency of the Bidder;
4. The quality of performance during previous contracts or services. For example the following information will be considered:

a. The administrative and consultant cost overruns incurred by Owners on previous contracts with Bidder,
b. The Bidder's compliance record with Contract General Conditions on other projects,
c. The submittal by the Bidder of excessive and/or unsubstantiated extra cost proposals and claims on other projects,
d. The Bidder's record for completion of the Work within the Contract Time or within Contract Milestones and Bidder's compliance with scheduling and coordination requirements on other projects,
e. The Bidder's demonstrated cooperation with the Owner, A/E and other contractors on previous contracts,
f. Whether the work performed and materials provided on previous contracts was in accordance with the Contract Documents;

5. The previous and existing compliance by the Bidder with laws and ordinances relating to contracts or services;
6. The sufficiency of the financial resources and ability of the Bidder to perform the contract or provide the service;
7. The quality, availability and adaptability of the goods or services to the particular use required;
8. The ability of the Bidder to provide future maintenance and service for the warranty period of the contract;
9. Whether the Bidder is in arrears to the Town on debt or contract or is a defaulter on surety to the Town or whether the Bidder's taxes or assessments are delinquent;
10. Such other information as may be secured by the Director of Public Works or their designee, having a bearing on the decision to award the contract, to include, but not limited to:

a. The ability, experience and commitment of the Bidder to properly and reasonably plan, schedule, coordinate and execute the Work,

b. Whether the Bidder has ever been debarred from bidding or found ineligible for bidding on any other projects.

E. The purpose of the above is to enable the Town of Vienna, in its opinion, to select the bid which is in the best interests of the Town. The ability of the low Bidder to provide the required bonds will not of itself demonstrate responsibility of the Bidder.

F. The Owner reserves the right to require from the Bidder: (1) submissions of references, within seven (7) days of bid opening, to include a listing of previous and current projects and (2) financial statements indicating current financial status, prepared in accordance with generally accepted accounting principles, by a CPA licensed to do business in Virginia.

G. The Owner reserves the right to defer award of this contract for a period of sixty (60) days after the due date of bids. During this period of time, the Bidder shall guarantee the prices quoted in their bid.

2.24. Appeal of Determination of Nonresponsibility

A. Any Bidder who, despite being the apparent low bidder, is determined not to be a responsible Bidder for a particular Town contract shall be notified in writing by the Procurement Officer. Such notice shall state the basis for the determination, which shall be final unless the Bidder institutes legal court action within ten (10) days of receipt of the notice.

B. If it is determined by the Courts that the decision of the Procurement Officer, was arbitrary or capricious, or otherwise in error and the award for the particular Town contract in question has not been made, the sole relief available to the Bidder shall be a finding that the Bidder is a responsive or responsible Bidder for the Town contract in question. Where the award has been made and performance has begun, the Town may declare the contract void upon a finding that this action is in its' best interest. Where a contract is declared void, the performing contractor shall be compensated for the cost of performance up to the time of such declaration. In no event shall the performing contractor be entitled to lost profits.

2.25. Protest of Award or Decision to Award

A. Any Bidder or offeror may protest the award or decision to award a contract by submitting a protest in writing to the Procurement Officer or their designee, or other official designated by the Town of Vienna, no later than ten (10) days after the award or the announcement of the decision to award, whichever occurs first; provided, however, that no protest shall lie for a claim that the selected Bidder or offeror is not a responsible Bidder or offeror. The written protest shall include the basis for the protest and the relief sought. The Procurement Officer, shall issue a decision in writing within ten (10) days of the receipt of the protest stating the reasons for the action taken. This decision shall be final unless the Bidder or offeror institutes legal court action in the Town of Vienna within ten (10) days of receipt of the written decision.

B. If prior to award it is determined that the decision to award is arbitrary or capricious, then the sole relief shall be a finding to that effect. The Procurement Officer or their designee, shall cancel the proposed award or revise it to comply with the law. If, after an award, it is determined that an award of

a contract was arbitrary or capricious, then the sole relief shall be as hereinafter provided. Where the award has been made but performance has not begun, the performance of the contract may be declared void by the Town. Where the award has been made and performance has begun, the Procurement Officer or their designee may declare the contract void upon a finding that this action is in the best interest of the Town. Where a contract is declared void, the performing contractor shall be compensated for the cost of performance at the rate specified in the contract up to the time of such declaration. In no event shall the performing contractor be entitled to lost profits.

C. Pending final determination of a protest, the validity of a contract awarded and accepted in good faith in accordance with this article shall not be affected by the fact that a protest or appeal has been filed.

D. An award need not be delayed for the period allowed a Bidder or offeror to protest, but in the event of a timely protest, no further action to award the contract will be taken unless there is a written determination that proceeding without delay is necessary to protect the public interest or unless the bid or offer would expire.

2.26. Negotiation with Lowest Responsible Bidder

A. The Owner reserves the right to negotiate any bid which exceeds the funds available to perform the Work as follows:

If, upon review of the lowest responsible bid, it is determined, in writing, by the Director of Public Works or their designee that sufficient funds are not currently budgeted in the project to award this contract and it is in the Town's best interest to proceed with the construction of the project without delay, the Director of Public Works or their designee may review the plans and contract documents to determine, in writing, possible areas of modification or reduction which can be made without significantly affecting the scope of the project. Upon determination that such areas may exist, the Director of Public Works or their designee shall notify the lowest responsive and responsible bidder of the Town's decision to exercise its option under this provision and request an interview with the contractor or their designee. If a satisfactory bid price is obtained, the Town shall then enter into a contract as modified during the negotiation session(s).

B. If a satisfactory price cannot be agreed to, then negotiations shall be terminated, all bids rejected and, if the requirement is still valid, the project shall be re-advertised.

2.27. Subcontracting

If one or more subcontractors are required, the Contractor is encouraged to utilize small, minority owned, and women-owned business enterprises. Upon contract award, the prime contractor agrees to make maximum effort to provide the names and addresses of each subcontractor, that subcontractor's status as defined by the Town of Vienna as a small, minority-owned and/or woman owned business, and the type and dollar value of the subcontracted goods/services provided.

2.28. Interest in More Than One Bid and Collusion

Multiple bids received in response to a single solicitation from an individual, firm, partnership, corporation, affiliate, or association under the same or different names will be rejected. Reasonable grounds for believing that a bidder is interested in more than one bid for a solicitation both as a bidder and as a subcontractor for another bidder, will result in rejection of all bids in which the bidder is

interested. However, a firm acting only as a subcontractor may be included as a subcontractor for two or more bidders submitting a bid for the work. Any or all bids may be rejected if reasonable grounds exist for believing that collusion exists among any bidders. Bidders rejected under the above provisions shall be disqualified if they respond to a re-solicitation for the same work.

2.29. Expenses Incurred in Preparing Proposal

The Town accepts no responsibility for any expense incurred by the bidder in the preparation and presentation of a bid, such expenses to be borne exclusively by the bidder.

2.30. Non-Appropriation

All funds for payments by the Town under this Contract are subject to the availability of an annual appropriation for this purpose by the Town Council. In the event of nonappropriation of funds by the Town Council for the goods or services provided under this Contract or substitutes for such goods or services which are as advanced or more advanced in their technology, the Town will terminate the Contract, without termination charge or other liability to the Town, on the last day of the then current fiscal year or when the appropriation made for the then current year for the services covered by this Contract is spent, whichever event occurs first. If funds are not appropriated at any time for the continuation of this Contract, cancellation will be accepted by the Contractor on thirty (30) days prior written notice, but failure to give such notice shall be of no effect and the Town shall not be obligated under this Contract beyond the date of termination.

2.31. Modification of Contract

The Town may, upon mutual agreement with the contractor, issue written modifications to the scope of work of this contract, and within the general scope thereof, except that no modifications can be made which will result in an increase of the original contract price by a cumulative amount of more than $50,000.00 or 25% whichever is greater, without the advance written approval of the Mayor and Council. (Section 2.2-4309 of Virginia Public Procurement Act).

Should it become necessary for the best interest of the Town to make modifications, the same shall be covered by change order. The Contractor shall not begin work on any alteration requiring a change order until the written agreement, setting forth the changes/modifications, has been executed by the Town and the Contractor.

If a satisfactory agreement cannot be mutually agreed to for any item requiring a change order, the Town reserves the right to terminate the contract as it applies to the items in question and make such arrangements as may be deemed necessary to complete the work.
The Town may, in writing, omit from the work any item, other than major items, found unnecessary to the project and such omission shall not be a waiver of any condition of the contract nor invalidate any of the provisions thereof. Major items may be omitted by change order.

The Contractor shall be paid for all work done toward the completion of the item prior to such cancellation, alteration or suspension of the work by the Town.
A major item shall be construed to be any item, the total cost of which is equal to or greater than ten percent (10%) of the total; contract amount for each separate alternate, computed on the basis of the proposed quantity and the contract unit price.

2.32. INSURANCE

The Contractor shall provide the Procurement Officer with a Certificate of Insurance PRIOR to the start of any work under the contract and agrees to maintain such insurance until the completion of the contract. The minimum limits of liability shall be:

Workers' Compensation -- Standard Virginia Workers' Compensation Policy
Broad Form Comprehensive General Liability--$2,000,000.00.
Combined Single Limit coverage to include:
Premises - Operations; Products/Completed Operations;
Contractual; Independent Contractors; Owners and Contractors
Protective; Personal Injury (Libel, Slander, Defamation of Character, etc.)

Automobile Liability--$1,000,000.00 Combined Single Limit.
The Town of Vienna, Virginia is to be named as an additional insured and this is to be so noted on Certificate of Insurance.

The policy shall be delivered to the Town of Vienna PRIOR to the commencement of any work.

A thirty (30) day written notice of cancellation or non-renewal shall be furnished by certified mail to the purchasing office at the address indicated on the solicitation.

My signature on this solicitation constitutes certification that, if I am awarded the contract, I shall obtain the required coverage as specified herein within ten (10) days of notification of award.

2.33. Hold Harmless Clause

Bids shall provide for the contractor holding harmless the Town of Vienna and representatives thereof from all suits, actions, or claims of any kind brought on account of any injuries or damages sustained by any person or property in consequence of any neglect in safeguarding contact work, or on account of any act or omission by the contractor or its employees, or from any claim or amounts arising or recovered under any law, bylaw, ordinance, regulation or decree.

2.34. Laws and Regulations

The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the work.

The Contractors and Subcontractors shall comply with the Virginia Contractor's Registration Law, Title 54.1, Chapter 11, Code of Virginia (1950), as amended.

All non-resident Contractors and Subcontractors submitting bids on the work described herein shall register with the Department of Labor and Industry under the provisions of Subsection 40.1-30 of the Code of Virginia (1950), as amended.

This contract and all other contracts and subcontracts are subject to the provisions of Articles 3 and 5, Chapter 4, Title 40.1, Code of Virginia (1950), as amended, relating to labor unions and the "right to work", and all Contractors and Subcontractors, whether residents or non-residents of the Commonwealth, who perform work related to the project shall comply with all of said provisions.

The Contractor shall furnish the Owner copies of affidavits upon request giving original dates, renewal dates and expiration dates of all labor contracts related to any phase of the work to be performed on the job site under this contract.

The provisions of all rules and regulations governing safety as adopted by the Safety Codes Commission of the Commonwealth of Virginia, issued by the Department of Labor and Industry under Title 40.1 of the Code of Virginia (1950), as amended, shall apply to all work under this contract.

2.35. Contract Rates

1. Rates specified by bidder shall be F.O.B. Destination and shall include all direct and indirect overhead costs such as transportation, supervision, general and administrative costs, etc. Labor and equipment rates will be paid on the basis of productive time at the job site. Regular hours are 8:00 a.m. through 4:30 p.m., Monday through Friday. Overtime hours are defined as Monday through Friday, 4:30 p.m. – 8:00 a.m., weekends and holidays.

2. A minimum service charge, not to exceed $300.00, may apply when the total cost of the actual work performed is less than the service charge. This charge does not apply to requests for estimates or work site evaluations. The minimum service charge will not apply when the cost of actual work performed is greater than the minimum service charge. The greater amount will apply.

3. The Contractors may be required to provide materials, rental equipment and subcontractors to fulfill the service requirements of the contract. If the Contractor provides materials, rental equipment or subcontractors, the compensation will be based on the actual cost of the materials, equipment or subcontractors with a markup equal to the percentages shown below.

No additional costs of any kind will be allowed.
Materials markup: 15%
Rental Equipment and Subcontracting markup: 10%

Note: Invoices which include material ($25.00 or more), equipment rental or subcontractor charges shall be accompanied by supplier's/subcontractor's invoices to substantiate costs to Contractor. The Contractor shall make every attempt to obtain the lowest price for the materials and rental equipment.

3. Section B - Scope of Work

3.1. Scope

The scope of this project includes the following items of work on the installation of sidewalk, concrete driveway aprons, concrete curb ramps, and retaining walls along Courthouse Rd SW, and along Pleasant St NW. The "Plans" refer to the plan package entitled: COURTHOUSE RD SW SIDEWALK IMPROVEMENT PLAN, and PLEASANT ST NW SIDEWALK IMPROVEMENT PLAN, prepared by Urban, Ltd dated April 2024, and May 2024, respectively. The construction documents can be found as attachments to this solicitation.

These two sidewalk projects shall be completed by October 31, 2024.

There is no DBE percentage requirement for this contract.

3.2. Purpose

The purpose of this Invitation for Bid is to provide sidewalk improvements within the public right-of-way in the following locations in the Town of Vienna: Courthouse Road SW between Maple Ave W and Locust St SW; and Pleasant Street NW between Maple Ave and 200 feet north. The project will provide pedestrian access along these sections of streets, and will connect to existing sidewalks.

3.3. The predetermined minimum wage rates can be found at the end of the IFB.

The scope of work is as follows:

1. Perform a preconstruction survey review of the proposed streets to confirm the existing conditions shown in the Plans. The Contractor shall be responsible for existing features within the limits of work that are not shown in the Plans which would require replacement or temporary relocation to perform sidewalk and retaining wall improvements. The cost for this work is to be included in the Contractor's unit price bid and within the appropriate unit price categories provided.

2. The Contractor is responsible for all survey layout, utility coordination/relocation (if applicable), material, tools, equipment, labor, permits, traffic control, cleanup and restoration and priced within other unit prices. The Contractor is responsible to restore all existing signs and pavement markings unless directed by the Plans and the Town.

3. Locate underground utilities prior to the start of construction. Protect all structures and utilities. The Contractor shall coordinate any adjustments with the appropriate utility owner. Locations of utilities shown on the plans are NOT guaranteed. The Contractor is solely responsible for any disruption in utility service and shall be solely responsible for any damage/repaired required. Several utilities are located within the construction limits, and it is the intent of this design to either leave them in place or adjust in place as appropriate.

4. Maintenance of Traffic: Provide maintenance of traffic and sequence of construction plan and schedule consistent with that shown in the Plans to be approved by the Town's Engineer prior to starting work and ordering of any materials. The phasing plans shall ensure that property owners have access to their properties during the project. Timing and duration of lane closures shall be consistent

with the workhours and limitations shown in the Plans for areas within the Town. Notification of all lane closures to the Town shall be made no less than 7 days in advance of the Wednesday of the week before of a lane closure. The maintenance of traffic/sequence of construction plan shall be in accordance with the 2011 Virginia Work Area Protection Manual and any revisions thereof. Night work may be permitted on a case-by-case scenario at the sole discretion of the Town Engineer. Weekend work is not permitted unless written permission is obtained from the Town Engineer.

5. Provide and place all traffic control devices necessary to facilitate the construction of the proposed elements. Contractor shall be required to follow the plans (and all notes) as it relates to the project's maintenance of traffic/sequence of construction as shown in the project's Plan.

6. Provide and install erosion and sediment control devices. The Contractor shall provide an employee Certified by the Department of Conservation and Recreation during land disturbing operations. The contractor shall comply with the Environmental Stipulation per VDOT Specification 107.16.

7. Modify at-grade utility appurtenances as indicated in the Plans to match finished grade. The Contractor shall provide a unit cost (per-hour) in the bid form for a licensed plumber to fix or relocate such conflicts in the event that the Town is not readily available to respond. Correcting/Relocating water line service lines is the contractor's responsibility at no additional cost to the project but must be coordinated with the Town before correcting/relocating begins.

8. Construct concrete sidewalks, curb ramps, retaining walls, retaining wall panels, concrete aprons, driveways, curb and gutter as shown the Plans. Concrete shall be VDOT Type A4 with a 28-day compressive strength of 4,000 psi, except as noted within the project's Plans.

9. No open trenches are proposed or permitted for this project.

10. Provide the following submittals (and sample slabs as required) for review by the Town's Engineer:

a. All permits required for the project.

b. Maintenance of Traffic/Construction Phasing Plan that is consistent with the proposed TMP/SOC Plan shown in the Plans.

c. Pavement Design for pavement repair shown in the Plans.

d. Bituminous Concrete Mix Design.

e. Materials Delivery Tickets.

f. As-built red-line markups of Plans.

g. VDOT Erosion & Sediment Control Contractor Certification.

11. Provide all other work as shown on the plans to complete the project.

a. The Contractor is to provide positive drainage for all areas of construction. No introductions of ponding areas shall be permitted. The Town will require the Contractor to adjust grades as necessary (at no additional cost to project) as needed to provide positive drainage.

b. All signs/posts, within the project's limits, shall be relocated/reset or removed (per plans) as appropriate and in accordance with the Plan, Town and MUTCD requirements.

i. Contractor shall install all proposed signage/posts and pavement markings per Plan, Town and MUTCD requirements.

3.4. Specifications

1. References

Work shall be in accordance with applicable state and local regulatory agencies. Work shall be in accordance with the most recent revisions and editions (including insertable and details sheets) of the following references:

a. Virginia Erosion and Sediment Control Handbook

b. Town of Vienna Public Facilities Manual and Construction Details

c. Virginia Road and Bridge Standards and Specifications

d. Manual of Uniform Traffic Devices (MUTCD)

e. Virginia Work Area Protection Manual

f. Arlington County Department of Environmental Services DES Construction Standard Details 2020 Detail Numbers R-2.4C and R-3.2

g. Arlington County Department of Environmental Services DES Construction Standards and Specifications 2020 Section 05500- Structural Steel and Miscellaneous Metal

h. Fairfax County Public Facilities Manual Plate No. 6-12, Tree Protection Fence Installation

Where conflict exists between these referenced specifications, seek direction from the Town's Engineer.

2. Limits of Construction

All work shall be limited to the right-of-way and easements granted to the Town for areas surrounding the limits of disturbance for each sidewalk improvement location. Contractor's personnel may not enter/park and no work may be done on other properties without express written permission from the Town. Contractor and Contractor's personnel shall not intrude on any private property adjacent to the project. The Contractor is responsible for ensuring all grounds/surfaces within five (5) feet of the limits of disturbance are equal to pre-construction conditions following completion of construction. Any restoration required, at the Town's discretion, is at the Contractor's expense. Pre and Post Condition photos for the job site are required to be provided to the Town Construction Manager.

The Contractor is responsible for procuring a staging area for any required stockpiling material and overnight storage of any equipment required, at no additional cost to the project. Use of the Town's property yard shall not be permitted.

3. Submittals

Pre-construction submittals shall be approved by the Town's Engineer before starting the related work. Test results shall be received within seven (7) days of test completion. The Town Engineer shall have up to two (2) weeks to review the submittals. Submittals that are no approved shall be corrected and re-submitted for review. Work may not start until submittals have been approved. If material test results indicate a failure of materials to meet their design strength, the Town may require the Contractor to remove and replace the affected materials at the Contractor's expense.

4. Measurement and Payment

This is a unit price contract. Measurement of unit price items shall be in accordance with the VDOT Road and Bridge Specifications, Division 1: Section 109 and the following sections where applicable.

A. The following items are measured in unit prices as defined in their respective section. For incidental Work that falls outside of the description for these categories, the price shall be included within the unit pricing of related items of Work provided in the Bid Form. Units shall be per the units shown on the Bid Form.

a. Clearing and Grubbing – Section 301.03
b. Excavation – Section 303.06
c. Sub-grade – Section 305.04
d. Sub-base Course – Section 308.05
e. Aggregate Base Course – Section 309.06
f. Base Course – Section 315.08
g. Top Course – Section 315.08
h. Curb & Gutter – Section 502.04
i. Driveway Aprons – Section 502.04
j. Sidewalks – Section 504.04
k. Pavement Demolition – Section 508.03
l. Adjusting Existing At-grade Utility Appurtenances – Section 510.04
m. Maintaining Traffic – Section 512.04
n. Contractor Construction Surveying – Section 517.06
o. Selective Tree Removal, Trimming and Cleanup – Section 601.04 (For tree stumps, refer to Clearing and Grubbing – Section 301.03)
p. Topsoil – Section 602.04
q. Sodding – Section 604.04
r. Planting – Section 605.07

s. Pavement Markings – Section 704.04

t. Signage – Sections 700.05 & 701.04

u. Galvanizing – Section 233

v. #68 Stone – Section 203

w. Ornamental Handrail – Arlington County Specification 04300; Detail R-3.2

3.5. Specification Amendments

Note: All references to the "Engineer" are deemed to be the Town of Vienna's Engineer.

TOWN OF VIENNA AMENDMENTS TO VDOT'S 2020 ROAD AND BRIDGE SPECIFICATIONS

3.6. Section 105-Control of Work of the Specifications is amended as follows:

105.14—Maintenance During Construction is amended to add the following:

The Contractor shall provide at least one person on the project site during all work operations who is currently certified either by the VDOT in Intermediate Work Zone Traffic Control, or by the American Traffic Safety Services Association (ATSSA) as a Traffic Control Supervisor (TCS). This person shall have the verification card with them while on the project site. This person shall ALSO be a verified IMSA Level II Field Technician. This person shall be responsible for the oversight of work zone traffic control within the project limits in compliance with the contract requirements involving the plans, specifications, the VWAPM, and the MUTCD. This person's duties shall include the supervision of all construction work zone activities and all work related to the signal construction.

If none of the Contractor's on-site personnel responsible for the supervision of such work have the required verification with them or if they have an outdated verification card showing they are not currently verified, all work on the project will be suspended by the Town of Vienna.

The Contractor shall provide at least one person on site who is, at a minimum, certified by VDOT or ATSSA in Basic Work Zone Traffic Control for each construction and/or maintenance operation that involves installing, maintaining, or removing work zone traffic control devices. This person or persons shall be responsible for the placement, maintenance, and removal of work zone traffic control devices. In the event none of the Contractor's on-site personnel for any construction/maintenance operation has, at a minimum, the required verification by the VDOT or ATSSA in Basic Work Zone Traffic Control, that construction/maintenance operation will be suspended by the Town until that operation is appropriately staffed in accordance with the requirements herein.

4. Section C - Special Provisions & Supplemental Specifications

Note: All references to the "Engineer" are deemed to be the Town of Vienna's Engineer or Town of Vienna Construction Manager.

4.1. Town of Vienna Special Provisions

SP-1: EXISTING TOWN INFRASTUCTURE

SP-2: EXISTING LANDSCAPING

SP-3: GENERAL EXCAVATION

SP-4: GENERAL STORAGE/EQUIPMENT STORAGE/MATERIAL STORAGE

SP-5: CONCRETE CONSTRUCTION

SP-6: REINFORCED CONCRETE RETAINING WALL WITH BRICK FACING

4.2. VDOT 2020 R & B Supplemental Specifications

SS246-002020-02: SECTION 246 – PAVEMENT MARKING

SS512-002020-03: SECTION 512 – MAINTAINING TRAFFIC

SS704-002020-02: SECTION 704 – PAVEMENT MARKINGS AND MARKERS

SPECIAL PROVISION FOR ARCHITECTURAL TREATMENT

4.3. Arlington County 2020 Specifications

SECTION 05500: STRUCTURAL STEEL AND MISCELLANEOUS METAL

4.4. SP-1 thru SP-6

SP-1: EXISTING TOWN INFRASTRUCTURE

Town/County/State road signs, delineators, guardrails, etc. shall not be removed unless otherwise specified on the Plans. Existing signs, delineators, guardrails, markers, trees, shrubs, fences, sidewalks, curb ramps, steps, etc. that are disturbed by any part of construction shall be replaced or restored to their original condition or to the satisfaction of the inspecting engineer, property owner, town, county, state, and/or any other agency having authority/jurisdiction. No additional compensation for these impacts as specified herein will be awarded to the Contractor, and the cost for such work shall be included in the price bid for all items part of this project.

SP-2: EXISTING LANDSCAPING

Contractor is responsible for the removal, storage, and (if necessary) replacement of all shrubbery and existing landscaping features. Restoration of the construction area to original or better condition shall be the responsibility of the Contractor. Contractor is responsible for all compaction of disturbed areas and shall complete work in accordance with the specifications outlined in the VDOT's Road and Bridge Specifications (current edition) and all Town of Vienna requirements. All compensation for work

(including labor, materials and equipment) shall be included in the lump-sum cost for landscaping quantity for the project.

SP-3: GENERAL EXCAVATION

Contractor shall excavate outside the drip line of all trees to prevent root damage. No excavated material is to be placed or tracked on the pavement. Excavated material shall be stored away from the paved roadway and sidewalks. All spilled material will be removed immediately.

SP-4: GENERAL STORAGE/EQUIPMENT STORAGE/MATERIAL STORAGE

No equipment or material shall be stored or permitted to stand unprotected where vehicular or pedestrian traffic is maintained. No equipment or material shall be stored on the sidewalk at any time. If Contractor wishes to store equipment and/or materials on adjacent properties, the Contractor shall negotiate independently with property owners.

SP-5: CONCRETE CONSTRUCTION

1. All concrete shall be 4000 psi air-entrained concrete conforming to current VDOT specifications and able to withstand freezing and thawing conditions.

2. The Contractor shall provide the VDOT Concrete mix design, and ticket with each concrete pour. The ticket shall indicate VDOT Mix Design Number, batch plant location, load volume, and time of mix.

3. All concrete must be poured at the jobsite within 90 minutes from time the concrete was mixed at the batch plant.

4. All concrete must have a slump of 4” or less unless otherwise directed or approved by the Engineer.

5. The Contractor shall not add water to the concrete unless otherwise directed or approved by the Engineer.

6. The Contractor shall use metal forms for all sections of straight sidewalk, and straight curb and gutter.

7. The Contractor shall protect all finished concrete from staining and contamination from adjacent earthwork, grading, backfilling, or asphalt placement or compaction.

SP-6: REINFORCED CONCRETE RETAINING WALL WITH BRICK FACING

The brick for both projects shall be Belden of type and color Belcrest #760 or approved equal.

The cap for both projects shall be US Stone of type and color Limestone Cap Flint Gray or approved equal.

The Contractor shall submit a sample of the brick, cap, and mortar for review and approval before commencing the work.

The proposed drain behind the Pleasant Street wall shall be connected to the existing Inlet structure near the curb return at Maple Avenue. The cost of the drain and connection shall be incidental to the lump sum bid price for the Reinforced Concrete Retaining Wall With Brick Facing.

Reinforced Concrete Retaining Wall With Brick Facing for each project shall be constructed according to the plan sheets and shall be paid at the contract bid price as lump sum for each wall. Payment shall include demolition, excavation, gravel, backfill, drain tile, filter fabric, concrete, steel reinforcing, brick, cap, mortar, testing of materials, labor, material, and equipment necessary for a complete retaining wall as shown on the plans. The pay limit for the excavation to be included and incidental with the bid item Reinforced Concrete Retaining Wall With Brick Facing shall extend from the back of the existing street curb to the cut line behind the retaining wall as shown on the plan. There is no separate payment for excavation to construct the wall within the pay limits defined herein.

4.5. SS246-002020-02

May 6, 2022

VIRGINIA DEPARTMENT OF TRANSPORTATION

2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS

SECTION 246 – PAVEMENT MARKING

SECTION 246 – PAVEMENT MARKING of the Specifications is amended as follows:

Section 246.02 – Detail Requirements is amended to replace the fifth through seventh paragraphs with the following:

Pavement marking materials shall produce a retroreflective line, message, legend or symbol of specified thickness, width or design in accordance with the MUTCD and Contract requirements.

Pavement marking material shall have the pigment, glass beads, retroreflective optics, and filler well dispersed in the resin, and shall be free from skins, dirt, and foreign objects.

Glass beads and retroreflective optics shall conform to Section 234.

Section 246.02(a) – Approval of Pavement Markings is amended to replace the second paragraph of the second bullet with the following:

When pavement markings are installed on the NTPEP test deck or the VDOT facility, the material's thickness, beads/retroreflective optics, and formulation shall be documented to ensure the equivalent thickness, beads/retroreflective optics and formulation are installed on VDOT roadways following approval.

Section 246.02(b) – Certifications is replaced with the following:

The pavement marking material manufacturer shall certify each batch or lot of material supplied and installed is the same product (thickness, retroreflective optics package and formulation) that was tested and approved on the AASHTO/NTPEP or VDOT test facility in accordance with the Materials Division, Manual of Instructions for Certification I and II Materials. The certification shall include the NTPEP test

number from the Materials Division's Approved Products List. The Contractor shall retain the manufacturer's certifications.

Section 246.02(c) – Warranty Requirements is amended to replace the first paragraph with the following:

Pavement marking products shall carry the warranties as supplied by the manufacturer of the individual marking types (classes) for the specific timeframes per type and class and the material requirements for retroreflectivity, durability, color, luminance (Y%), and adhesion as referenced herein. Warranties shall be those commercially supplied or those unique to the Commonwealth in the case of certain products, such as Type B, Class VI preformed pavement marking tape as detailed herein. Manufacturers' warranties shall be obtained by the Contractor and assigned to the Department in writing prior to final acceptance. Warranty periods shall begin on the date of receipt at the project as verified by delivery tickets signed by the Engineer.

Section 246.03(a) – Paint Pavement Marking Materials (Type A) is renamed **Section 246.03(a) – Conventional or Cold Weather Paint Marking Materials (Type A, Class I) and** amended to replace the first paragraph with the following:

Type A, Class I paint material shall be a fast-drying, waterborne, nonleaded, acrylic or modified acrylic resin paint suitable for use on both asphalt and hydraulic cement concrete pavement surfaces and shall be selected from the Materials Division's Approved Products List No. 20. Type A, Class I material shall be designed to be applied at approximately 15 mils wet film thickness in conjunction with AASHTO M 247 Type I beads as per Section 234 of the Specifications.

Type A, Class I cold weather paint shall be capable of being both applied and remaining fully adhered to the surface at temperatures below 40 °F.

Section 246.03(a)1e – IR Scan from NTPEP is replaced with the following:

e. **IR Scan from NTPEP**.

Section 246.03(b) – High Build Paint Marking Materials (Type A, Class II) is added as follows:

Type A, Class II Paint material shall be a fast-drying, waterborne, nonleaded, acrylic or modified acrylic resin paint suitable for use on both asphalt and hydraulic cement concrete pavement surfaces and shall be selected from the Materials Division's Approved Products List No. 20. Type A, Class II material shall be designed to be applied at approximately 27 mils wet film thickness.

1. Initial Approval - Maintained retroreflectivity, color (including luminance), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

a. **Maintained Retroreflectivity:** The photometric quantity to be measured is the coefficient of retroreflected luminance (R_L) in accordance with ASTM E1710 for 30-meter geometry. R_L shall be expressed in millicandelas per square foot per foot-candle when measured in the skipline or centerline areas:

Coefficient of Retroreflected Luminance (R_L) (mcd/ft^2/fc) Paint

Color	Initial	1 Year In-Service
White	300	125
Yellow	225	100

b. **Day and Nighttime Color and Luminance (Y%):** Measured according to ASTM D6628.

c. **Durability:** Paint shall have a durability rating of at least 8 when determined in the wheel path area when tested in accordance with the NTPEP Work Plan.

d. **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested according to ASTM E303, if available.

e. **IR Scan from NTPEP**.

2. Batch Testing

Paint batch testing shall be performed by the Department on samples obtained from the point of manufacture or from the field in accordance with the Materials Division's Manual of Instructions. The test results shall be compared against NTPEP lab test results and the Specifications. Testing shall be performed to determine the following physical requirements and properties:

a. **Solids, (% weight)** according to ASTM D2369: Acceptable range from NTPEP results (+/- 2%).

b. **Pigment (% weight)** according to ASTM D3723: Acceptable range from NTPEP results (+/- 2%).

c. **Density (wt/gal.)** according to ASTM D1475: Acceptable range from NTPEP results (+/-0.3 lbs/gal).

d. **Viscosity (KU)** according to ASTM D562: Acceptable range from NTPEP results (+/-5KU).

e. **Contrast Ratio** according to ASTM D2805 (2°,D 65): Paint shall show a dry hiding quality that will give a contrast ratio of at least 0.96 at (15 mil) wet film thickness.

f. **Day Color, Luminance (Y%) - (without Drop-on Beads):**

Color testing results shall conform to the chromaticity coordinate limits that follow. Color determination for paint materials will be made without drop-on beads at least 24 hours after application in accordance with ASTM D6628.

Day Color, Chromaticity Coordinates (Without Drop-on Beads), High Build Paint									
	x	y	x	y	x	y	x	y	Y%
White	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	80.0 Min
Yellow	0.493	0.473	0.518	0.464	0.486	0.428	0.469	0.452	50.0-60.0

g. **Settling properties:** Settling shall be no less than a rating of 8 when tested in accordance with the NTPEP Work Plan.

h. **Freeze-thaw and heat stability:** Paint shall show no coagulation or change in viscosity greater than +/- 5 KU when tested in accordance with the NTPEP Work Plan.

i. **Water resistance:** Paint shall show no blistering, peeling, wrinkling, softening, or loss of adhesion when tested in accordance with the NTPEP Work Plan.

j. **VOC:** The VOC content shall be no greater than 150 grams/liter when tested in accordance with EPA Method 24.

k. **Flash point:** Paint shall have a flash point of at least 201 degrees F when tested in accordance with ASTM D93, Pensky-Martens Closed Cup.

l. **Infrared (IR) Scan:** Shall match IR scan from NTPEP.

Section 246.03(b) – Thermoplastic Marking Materials (Type B, Class I) is renumbered as 246.03(c) and replaced as follows:

Thermoplastic material shall be suitable for use on asphalt and hydraulic cement concrete pavement surfaces and shall be selected from the Materials Division's Approved Products List No. 43.

The binder shall be either alkyd or hydrocarbon based. If an alkyd thermoplastic is used, the binder shall consist of synthetic resins, at least one of which is solid at room temperature, and high-boiling plasticizers. At least one-half of the binder composition shall be a maleic-modified glycerol ester of resin and shall be at least 10 percent by weight of the entire material formulation.

Thermoplastic marking materials shall be capable of application at pavement surface temperatures of 50 degrees Fahrenheit and above on all asphalt and hydraulic cement concrete pavement surfaces. Thermoplastic material shall be capable of successfully fusing to itself and previously applied thermoplastic pavement markings.

1. Initial Approval - Maintained retroreflectivity, color, luminance (Y%), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

a. **Maintained Retroreflectivity:** The photometric quantity to be measured is the coefficient of retroreflected luminance (R_L) in accordance with ASTM E1710 for 30-meter geometry when measured in the skip line area.

Coefficient of Retroreflected Luminance (R_L) (mcd/ft^2/fc) Thermoplastic		
Color	**Initial**	**1 Year In-Service**
White	300	250
Yellow	250	200

b. **Day and Nighttime Color and Luminance (Y%):** According to ASTM D6628

c. **Durability:** Thermoplastic shall have a durability rating of at least 8 as determined in the wheel path area when tested in accordance with the NTPEP Work Plan.

d. **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested per ASTM E303, if available.

2. Batch Testing:

Thermoplastic batch testing will be performed by the Department on samples obtained from the point of manufacture or from the field in accordance with the Materials Division's Manual of Instructions. The tests results will be compared against the following specifications and requirements:

a. **Pigment and Glass Bead (% Weight)** according to ASTM D4451 - 82.0% Max

b. **Intermix Glass Bead Content (% Weight)** according to AASHTO T 250 and ASTM D4797 - 30.0% Min

c. **TiO2 (%) for white thermoplastic** according to ASTM D1394 or equivalent method - 10.0% Min

d. **Binder (%)** according to AASHTO T 250/ASTM D4451 - 18.0% Min

e. **Calcium Carbonate and Inert Fillers** - 42.0 % Max

f. **Day Color, Luminance (Y%) (Without Drop-on Beads):** Color testing results shall conform to the chromaticity coordinate limits that follow. Color determination for thermoplastic materials will be made without drop-on beads after cooling in accordance with AASHTO T 250 and ASTM D6628.

Day Color, Chromaticity Coordinates (Without Drop-on Beads), Thermoplastic									
	x	**y**	**x**	**y**	**x**	**y**	**x**	**y**	**Y%**
White	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	80.0 Min
Yellow	0.499	0.466	0.545	0.455	0.518	0.432	0.485	0.454	40.0-60.0

g. **Nighttime Yellow Color (with Drop-on Beads):** The initial nighttime color of yellow thermoplastic pavement marking material shall conform to the following CIE chromaticity coordinate requirements when tested in accordance with ASTM D6628 and VTM-111:.

Nighttime Color, Chromaticity Coordinates (with Drop-on Beads) Thermoplastic								
Color	1		2		3		4	
	x	y	x	y	x	y	x	y
Yellow	0.486	0.439	0.520	0.480	0.560	0.440	0.498	0.426

h. **Water absorption:** Materials shall not have more than 0.5 percent retained water by weight when tested in accordance with ASTM D570, Procedure A.

i. **Softening point:** Materials shall have a softening point of at least 194 degrees F as determined in accordance with ASTM E28.

j. **Specific gravity:** The specific gravity of the thermoplastic compound at 77 degrees F shall be from 1.7 to 2.2.

k. **Impact resistance:** The impact resistance shall be at least 10 inch-pounds at 77 degrees F after the material has been heated for 4 hours at 400 degrees F and cast into bars of 1-inch cross-sectional area, 3 inches long, and placed with 1 inch extending above the vise in a cantilever beam, Izod-type tester conforming to ASTM D256 using the 25 inch-pound scale.

l. **No-Track Time:** Material shall set to bear traffic in not more than 2 minutes when the road temperature is 50 degrees F or above.

m. **Intermixed Glass beads:** Glass beads shall conform to Section 234.

n. **Flashpoint:** The material flashpoint shall be no less than 500 degrees F when tested in accordance with ASTM D92.

Section 246.03(c) Preformed Thermoplastic Pavement Marking Material (Type B, Class II) is renumbered as 246.03(d).

Section 246.03(d)1 Initial approval is amended to replace the first paragraph with the following:

Maintained retroreflectivity, color, luminance (Y%), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

Section 246.03(d) Epoxy-Resin Pavement Marking Material (Type B, Class III) is renumbered as 246.03(e).

Section 246.03(e)1 Initial approval is amended to replace the first paragraph with the following:

Maintained retroreflectivity, color, luminance (Y%), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

Section 246.03(e) Polyurea Pavement Marking Material (Type B, Class VII) is renumbered as 246.03(f).

Section 246.03(f)1 Initial approval is amended to replace the first paragraph with the following:

Maintained retroreflectivity, color, luminance (Y%)), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

Section 246.03(f) Permanent, Plastic-Backed, Preformed Tapes (Type B, Class IV and Type B, Class VI) is renumbered as 246.03(g).

Section 246.03(g)1 Initial approval is amended to replace the first paragraph with the following:

Maintained retroreflectivity, color, luminance (Y%), durability, and adhesion shall conform to the following requirements after the material has been installed on the test deck for 1 year:

Section 246.03(g) – Temporary Pavement Marking Materials is renumbered as 246.03(h) and replaced with the following:

Temporary Pavement Marking Materials other than paint shall consist of Type D, Class III, removable, wet reflective tape and Type E removable black, non-reflective tape. Determination of conformance will include, but not be limited to, the evaluation of test data from AASHTO's NTPEP or other VDOT Test Facilities.

1. **Wet Reflective, Removable Tape (Type D, Class III):**

Wet reflective, removable tape shall be a durable, retro-reflective pliant material consisting of a mixture of polymeric materials, pigments, and glass beads (reflective optics) evenly distributed throughout its

cross-sectional area and embedded into the surface. This tape shall be suitable for use on both asphalt and hydraulic cement concrete surfaces and shall be selected from the Department's Approved List 17.

a. **Initial Approval** - Maintained retroreflectivity (dry and wet), color, luminance (Y%), and adhesive bond rating shall conform to the following requirements after the material has been installed on the test deck for 90 days:

(1) **Maintained Dry Retroreflectivity:** The dry photometric quantity to be measured is the coefficient of retroreflected luminance (R_L) in accordance with ASTM E1710 for 30-meter geometry when measured in the skip line or centerline areas.

Coefficient of Retroreflected Luminance (R_L) (mcd/ft^2/fc) Dry Retro Removable Tape-Type D, Class III		
Color	**Initial**	**90 Days In-Service**
White	250	150
Yellow	200	100

(2) **Maintained Wet Retroreflectivity:** The wet photometric quantity to be measured is the coefficient of retroreflected luminance (R_L) in accordance with VTM 124 (Visual Evaluation or ASTM E2177, Recovery Method) when measured in the skip line or centerline areas.

Coefficient of Retroreflected Luminance (R_L) (mcd/ft^2/fc) Wet Retro Removable Tape-Type D, Class III		
Color	**Initial**	**90 Days In-Service**
White	150	100
Yellow	125	75

(3) **Day and Nighttime Color and Luminance (Y%):** According to ASTM D6628.

(4) **Adhesive Bond Rating:** The average adhesive bond rating (from transverse and longitudinal lines) shall be 3 or higher according the NTPEP Work Plan.

(5) **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested according to ASTM E303, if available.

(6) **Thickness:** Per the manufacturer's recommendation.

(7) **Adhesion:** No line shall be displaced, torn, or missing.

b. **Batch Testing**:

Wet reflective, removable tape batch testing will be performed by the Department on samples obtained from the point of manufacture or from the field in accordance with the Materials Division's Manual of Instructions. Test results shall be compared against the following specifications and requirements:

(1) **Retroreflectivity:** Refer to initial requirements

(2) **Day and Night Color and Luminance:** Refer to initial requirements

(3) **Thickness:** Refer to initial requirements

(4) **Width:** The width shall be no less than the nominal width and no greater than 1/8" of the nominal width.

(5) **Length:** The length shall be no less than the length stated on the manufacturer's packaging.

(6) **Skid Resistance:** Refer to initial requirements.

2. **Removable Black, Non-Reflective Tape (Type E):**

Removable black, non-reflective tape shall be a durable, pliant material consisting of a mixture of polymeric materials, pigments and a friction material evenly distributed throughout its cross-sectional area and embedded into the surface. Removable black, non-reflective tape shall be suitable for use on asphalt concrete pavement surfaces and shall be selected from the Department's Approved List 17.

a. **Initial Approval** - Maintained adhesive bond rating shall conform to the following requirements after the material has been installed on the test deck for 90 days:

(1) **Adhesive Bond Rating:** The average adhesive bond rating (from transverse and longitudinal lines) shall be 3 or higher according to the NTPEP Work Plan.

(2) **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested according to ASTM E303, if available.

(3) **Thickness:** Per the manufacturer's recommendation.

(4) **Adhesion:** No line shall be displaced, be torn, or missing.

b. **Batch Testing**

Black removable, non-reflective tape batch testing will be performed by the Department on samples obtained from the point of manufacture or from the field in accordance with the Materials Division's Manual of Instructions. Test results shall be compared against the following specifications:

(1) **Skid Resistance:** Refer to initial requirements

(2) **Thickness:** Refer to initial requirements

(3) **Width:** The width shall be no less than the nominal width and no greater than 1/8" of the nominal width.

(4) **Length:** The length shall be no less than the length stated on the manufacturer's packaging.

4.6. SS512-002020-03

July 1, 2022

VIRGINIA DEPARTMENT OF TRANSPORTATION

2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS

SECTION 512 – MAINTAINING TRAFFIC

SECTION 512 – MAINTAINING TRAFFIC of the Specifications is amended as follows:

Section 512.02(f) – Temporary (Construction) signs is replaced with the following:

Temporary (Construction) signs shall have retroreflective sign sheeting in accordance with Sections 247 and 701.

Sign substrates for rigid temporary signs and temporary overlay panels shall be fabricated of either aluminum at least 0.080-inches thick, conforming to Section 229.02(a); 0.4-inch-thick corrugated polypropylene; 0.4-inch-thick corrugated polyethylene plastic; or 0.079-inch-thick aluminum/plastic laminate as approved by the Engineer. Sign substrates shall be smooth, flat, and free of metal burrs or splinters.

Sign substrate materials for signs mounted on drums, Type 3 barricades, and portable sign stands shall be as specified below and shall be the same material that was used when the device was approved in accordance with National Cooperative Highway Research Program (NCHRP) Report 350 or MASH.

Sign Substrates for Type 3 Barricades and Portable Sign Stands
Rollup sign 0.4-inch-thick corrugated polypropylene or polyethylene plastic 0.079-inch-thick aluminum/plastic laminate

Sign Substrates for Drums
0.4-inch-thick corrugated polypropylene or polyethylene plastic

Section 512.03 – Procedures is amended by replacing the sixth and seventh paragraphs with the following:

The Contractor shall correct ineffective or unacceptable work zone traffic control devices immediately unless allowed otherwise by the Contract.

The color of Automated Flagger Assistance Device trailers, arrow board trailers, portable traffic control signal trailers, ITS trailer equipment, and portable changeable message sign trailers and sign frames shall be either Virginia highway orange (DuPont Color No. LF74279 AT or color equivalent) or federal yellow. The back traffic facing trailer frame, where the signal and brake lights are located, shall be fully covered with 2-inch-high retroreflective sheeting conforming to Section 247.02(c). The sheeting shall have alternating 11 inch wide vertical red stripes and 7 inch wide vertical white stripes.

The Contractor shall locate, remove, and dispose of all existing asphalt embedded Snowplowable Raised Pavement Marker (SRPM) castings which lie within a travel lane that has been shifted during construction for three months or longer. The cavity left by the removal of the existing marker shall be

cleaned of debris, filled with an approved mix design for resurfacing or material found on the Department's Approved List 78, and compacted before shifting traffic.

Section 512.03(a) – Temporary Signs is replaced with the following:

Temporary Signs: The Contractor shall furnish, install, remove, relocate, and maintain temporary signs and sign panels necessary for prosecution of the work which shall include but not be limited to, maintenance of traffic, off project detour signs, and begin and end of road work signs for construction, maintenance, permit, utility, and incident management activities. Installation shall be in accordance with Section 701. The Contractor shall also furnish and install those signs not listed in the *VWAPM,* the MUTCD, or the Contract (such as "Turn Lane Open with arrow" and "Grooved Pavement Ahead") that may be required by the Engineer.

Signs shall be fabricated in accordance with the MUTCD, VWAPM, the FHWA Standard Highway Signs and Markings book (including its Supplement), and the Virginia Standard Highway Signs book. If the Contractor proposes a sign message not included in the Plans, VWAPM, or MUTCD, then the Contractor shall submit a sign fabrication detail to the Engineer for approval before fabrication. The sign fabrication detail shall include sign size, legend, font, legend dimensions, radius, border, margins, sheeting type, and colors.

The Contractor shall relocate, cover, uncover, remove, and reinstall existing signs that conflict with the signs needed for maintenance of traffic. Covering of existing signs shall be accomplished in accordance with Section 701.03(d).

The Contractor shall ensure an unrestricted view of sign messages. The Contractor shall furnish and install flags for temporary signs, as directed by the Engineer; however, flags will not be required for use on portable sign supports.

Sign location, lateral placement, and mounting height shall conform to the *VWAPM,* the *MUTCD,* the Contract, and as directed by the Engineer. The Contractor shall furnish all sign supports and hardware for use with temporary signs.

When the sign sequence is not provided in the plans, either by illustration or reference to a typical traffic control figure in the VWAPM, the Contractor shall submit a sketch of his proposed sign sequencing and positioning to the Engineer for approval before installation.

Temporary signs shall be mounted using wooden post supports, square tube signpost supports, or portable sign stands, except where noted otherwise on the Plans. Portable sign stands shall not be used longer than three consecutive days (72 continuous hours). Wooden and square tube post installations shall be in accordance with Standard Drawing WSP-1.

Portable sign stands manufactured on or before December 31, 2019, may be used if they are in good working condition, conform to NCHRP Report 350 Test Level 3 or MASH, and are a product shown on the Traffic Control Device Pre-Approval list. Portable sign stands manufactured after December 31, 2019, shall conform to MASH and shall be a product shown on the Department's Approved List for MASH Approved Products. The Contractor shall submit a certification letter stating the brands and models of portable sign stands to be used along with a copy of the certification letters indicating compliance with NCHRP Report 350 Test Level 3 or MASH. Portable sign stands shall support a 20 square foot sign in

sustained winds of 50 mph or wind gusts of passing vehicles without tipping over, walking, or rotating more than ±5 degrees about its vertical axis.

Portable sign stands shall include decals, stenciling, or some other durable marking system that indicates the manufacturer and model number of the stands. Such marking shall be of sufficient size so it is clearly legible to a person in a standing position.

The Contractor shall erect, maintain, move, and be responsible for the security of sign panels and shall ensure an unrestricted view of sign messages for the safety of traffic.

Section 512.03(g)2b(1) – **Drums** is replaced with the following:

Drums shall be round or partially round; made from plastic; have a minimum height of 36 inches; have a cross-sectional width no less than 18 inches in any direction; have a closed top; and shall conform to the VWAPM. Drums shall be designed to allow for separation of ballast and drum upon vehicular impact but not from wind and vacuum created by passing vehicles. The base of the unit height shall not exceed 5 inches. Two-piece drums may have a flared drum foundation, a collar not exceeding 5 inches in height and be of suitable shape and weight to provide stable support. One-piece drums that comply with these requirements may be used.

The Contractor shall furnish and install signs (Stop, Chevron, keep Right, etc.) for drums when directed by Engineer. Signs used on drums shall be tested for conformance with NCHRP 350, Test Level 3, and/or MASH requirements and shall be made of the same material used in the test. The Contractor may use other materials allowed by the FHWA acceptance letter when approved by the Engineer.

Section 512.03(g)2b(3) – Direction indicator barricades is deleted.

Section 512.03(h) –Traffic Barrier Service is replaced with the following:

Traffic Barrier Service shall be of sufficient length to provide anchorage and protection of traffic and personnel in work areas.

The Contractor shall begin continuous progressive prosecution of the work protected by the barrier once the barrier is in place until its completion. If the Contractor ceases to continuously prosecute such work, the Engineer may cause the Contractor to discontinue operations in other areas on the project and concentrate work efforts behind the traffic barrier service until that work is completed. The Contractor shall remove the traffic barrier service when the Engineer determines work is completed to the extent that traffic barrier service is no longer required.

While performing work activities, workers and equipment shall remain behind the protection of the traffic barrier service except as approved by the Engineer. Work outside traffic barrier service protection shall only proceed under the protection and direction of approved traffic control devices or flagger service to safeguard workers and traffic in advance of and at the point the traffic barrier service is opened for ingress or egress adjacent to the travel lane. The Engineer will not permit any equipment extending into an open travel lane.

Barrier openings for access to the work area may be provided only along tangent sections or along curved sections on the inside of traffic and shall be limited to the minimum length required for

equipment access. The Contractor shall delineate and maintain normal pavement alignment at the barrier opening with Type D pavement marking.

At ingress openings, the exposed end of the barrier service shall be provided with a temporary impact attenuator approved by the Engineer. At egress openings, the exposed end shall be transitioned at a rate that complies with the VWAPM. For speeds below 30 mph, the transition flare rate shall be the same as that indicated for 30 mph. An impact attenuator will not be required at the exposed end of egress openings in barrier service provided the deflection angle between the pavement edge and the ends of the barrier service openings is 20 degrees or more.

Repairs to traffic barrier service shall match existing barrier so that positive connections can be maintained.

Delineators and barrier panels shall have reflectorized sheeting conforming to Section 247, shall be from the Department's Approved List 23, and shall be installed on traffic barrier service in accordance with the VWAPM.

The Contractor shall maintain the structural integrity of the barrier and its alignment while it is in use and shall maintain any associated warning lights, barrier delineators, barrier panels, and other devices in functional, clean, and visible conditions at all times.

1. **Guardrail barrier service and terminal treatments** shall be installed in accordance with Section 505 except that the offset distance shall be as specified by the Engineer. The Contractor may be permitted to reuse guardrail, or its hardware used for traffic barrier service guardrail for permanent installation provided the guardrail material is acceptable to the Engineer and conforms to Section 505 and the Standard Drawings for such guardrail. Marred galvanized surfaces shall be repaired in accordance with Section 233. Terminal treatments shall be permanently identified with a device specific Manufacturers' identification number by stamping or marking with a durable weather resistant material in accordance with § 33.2-274.1 of the Code of Virginia.

2. **Traffic barrier service** (concrete or longitudinal steel) shall be installed in accordance with the Plans and Standard Drawings or as directed by the Engineer, who will design according to Appendix A of the VWAPM. When traffic barrier ends at guardrail, fixed object attachment methods for construction zone shall be used to connect the barrier to the guardrail. Installation shall include additional guardrail posts and attachments as required. The traffic barrier, at a minimum, shall be tapered with the end of the barrier located behind the adjacent guardrail post in accordance with the VWAPM. Barrier connections shall be snug to prevent motion between sections.

Traffic barrier service used as a parapet shall be anchored as shown on the Plans or Section 500 of the Standard Drawings. Anchor holes in bridge decks shall be drilled with a rotary impact drill or other approved equipment that will limit damage to the deck. Anchor holes shall be located to avoid cutting reinforcing steel. Upon removal of the parapet, anchor holes shall be cleaned and filled with Type EP-4 or EP-5 epoxy mortar conforming to Section 243.

The Department will not permit the use of concrete traffic barrier service for permanent installations on bridge structures.

Traffic barrier service sections manufactured on or before December 31, 2019, and successfully tested to NCHRP 350 or MASH 2009 may be used until December 31, 2029, if they are in good working condition, and are a product shown on the Department's Approved Lists for NCHRP-350 or MASH Approved Products. Traffic barrier service sections manufactured after December 31, 2019, and all products in use after December 31, 2029, shall conform to MASH 2016 or its successor, and shall be from the Department's Approved List for Provisionally Approved MASH Products. All traffic barrier service runs shall be interlocking barrier of the same design or type.

The Contractor shall visually inspect all traffic barrier service shipped to a project before placing it in use. Concrete barrier sections shall be structurally sound with no concrete missing along the top, bottom, sides, or end sections of the barrier; no through cracks; and no exposed rebar. The Contractor shall promptly remove any traffic barrier service found by the Contractor or Engineer to be unacceptable due to inadequate structural integrity or functionality and replace the concrete barrier service at no cost to the Department.

Concrete barrier service shall be cleaned or coated sufficiently to afford good visibility and uniformity of appearance.

The Engineer will review and must approve the layout and anchorage method for job specific applications before the barrier is authorized for installation.

With the approval of the Engineer, the Contractor may use additional traffic barriers for his convenience but at his own expense.

Section 512.03(i) – Impact Attenuator Service is replaced with the following:

Impact Attenuator Service: The Contractor shall install impact attenuator service at locations shown on the Plans or designated by the Engineer. An object marker for temporary impact attenuator shall be installed on the attenuator according to the details shown in the Standard Drawings. The object marker for impact attenuator service shall have reflective sheeting con-forming to Section 247 featuring alternating diagonal black and orange 3-inch stripes sloping downward at an angle of 45 degrees in the direction vehicular traffic is to pass. Impact attenuators shall be permanently identified with a device specific Manufacturers' identification number by stamping or marking with a durable weather resistant material in accordance with § 33.2-274.1 of the Code of Virginia.

Impact Attenuator Service not shown on the Plans may be used at the request of the Contractor for the Contractor's convenience at the Contractor's expense.

All impact attenuator service shall be reviewed and approved by the State Location and Design Engineer before installation.

Impact Attenuators manufactured on or before December 31, 2019, and successfully tested to NCHRP 350 or the MASH 2009 may continue to be used until December 31, 2029. Impact Attenuators manufactured after December 31, 2019, shall meet MASH 2016 and shall be from the Department's Approved List for Provisionally Approved MASH Products.

Section 512.03(j)2c – Equipment is replaced with the following:

12-inch aluminum or polycarbonate traffic signal head sections with backplates mounted in the vertical display arrangement. Signal head sections may be mounted in the horizontal display arrangement when approved by the Engineer. Signal head sections and backplates shall conform to Section 238.

Section 512.03(k) – Temporary (Construction) Pavement Markings is replaced with the following:

Temporary (Construction) Pavement Markings shall be installed at locations shown on the Plans, the *VWAPM,* and as directed by the Engineer. Temporary pavement markings shall conform to Section 704 and be selected from the Department's Approved List 17. Temporary pavement markings are classified as Type A or B (temporary markings), Type D, Class III (removable tape), Type E (non-reflective black removable tape), and Flexible Temporary Pavement Markers (FTPMs).

The Contractor shall install temporary pavement markings in accordance with the manufacturer's recommendations, except that if the manufacturer's recommendation for material thickness and quantity of beads is less than that used when the material was tested by the NTPEP, the minimum product application rates shall conform to the NTPEP approved test rates for the specific marking. The Contractor shall furnish a copy of the manufacturer's installation recommendations, including the NTPEP data for product thickness and glass bead quantities to the Engineer.

The Contractor shall maintain the temporary pavement markings and shall correct any deficient markings by reapplying markings as directed or needed. The Department considers deficient any temporary pavement markings that provide inadequate guidance to motorists due to inadequate retroreflectivity, color qualities, or adherence to the pavement. The Engineer will make a visual nighttime inspection of all temporary pavement markings to identify areas where markings have inadequate retroreflectivity. Other deficient qualities may be identified by visual inspection at any time.

Markings that no longer adhere to the pavement, and may cause guidance problems for motorists, or are inadequately retroreflective as determined by the Engineer shall be replaced by the Contractor, with the following exceptions:

- Reapplication of skip line temporary pavement markings is not required unless the pavement marking does not adhere or inadequate retroreflectivity qualities are present for at least two consecutive skip lines.
- Reapplication of centerline (except skip lines) or edge line temporary pavement markings is not required unless the pavement marking does not adhere or inadequate retroreflectivity qualities are present for a continuous section of at least 70 feet.
- Reapplication of transverse markings is not required unless the pavement marking does not adhere or inadequate retroreflectivity qualities are present for a continuous section of at least 3 feet.

The Contractor may take retroreflectivity readings to counter visual observations by the Engineer as the basis for replacement of temporary pavement markings. These measurements shall be taken within 48 hours after the Contractor has been notified of the visual determination by the Engineer of deficient markings. The Engineer will grant additional time to the Contractor when inclement weather prevents accurate measurement of the temporary pavement markings.

The Contractor shall brush any form of debris from the marking before taking the retroflectivity readings. Retroflectivity measurements shall be taken in the presence of the Engineer using Contractor furnished equipment conforming to ASTM E1710. A copy of the operating instructions for the reflectometer shall be furnished to the Engineer before taking the measurements. The Contractor shall calibrate and operate the equipment in accordance with the manufacturer's instructions. The photometric quantity to be measured is the coefficient of retroreflected luminance (R_L), which shall be expressed as millicandelas per square foot per footcandle (mcd/sf/fc). Measurements shall be taken at three random locations within each area of markings that are suspected of being inadequately retroreflective. When the length of the questionable visually inspected area is greater than 1 mile, the Contractor shall take measurements at three locations per mile segment or portion thereof. Measurements for all lines shall be taken in the middle of the line horizontally. Measurements for skip lines shall be taken in the middle of their length. Measurements for transverse lines shall be taken outside of the wheel path locations. The Engineer will designate the locations along the line segments where the measurements shall be taken. The Contractor shall make a log of the measurements and their locations and provide a copy to the Engineer. When the average of the three readings for an area is below 100 mcd/sf/fc, the Contractor shall reapply the markings as indicated.

Temporary (construction) pavement markings found in need of reapplication in accordance with these requirements shall be reapplied by the Contractor at no additional cost to the Department, with the following exceptions:

- Type D markings that have been under traffic for more than 180 days and requires reapplication will be paid for at the contract unit price when reapplied, unless the manufacturer's warranty coverage is still applicable.
- Markings damaged by the Department's snow removal or other maintenance and construction operations will be paid for at the contract unit price.

Deficient temporary pavement markings shall be replaced in the time specified in Section 704 for the maximum duration of unmarked roads.

Eradication for reapplication of Type A or B pavement markings is not required if allowed by the marking manufacturer, if the existing marking is well adhered and the total thickness of the existing and reapplied marking combined will not exceed 40 mils. If not well adhered, 90 percent of the existing markings shall be eradicated before reinstallation of the markings.

Existing Type D markings that are deficient (no longer retaining sufficient retroreflectivity) shall be removed before reapplication of new Type D, Class III markings.

1.**Temporary Type A or B pavement markings** shall be used where the roadway is to be resurfaced before changes in the traffic pattern or where pavement is to be demolished and traffic patterns will not change before demolition.

2. **Type D, Class III pavement markings** shall be used on final roadway surfaces or in areas where traffic patterns are subject to change before pavement is resurfaced, unless otherwise specified in the Contract.

On non-final pavement surfaces, the Contractor may install Type A or B pavement markings when the surface temperature of the pavement is below the manufacturer's minimum application temperature for a Type D pavement marking. In such cases, the Contractor shall select a Type A or B product known to perform the best under those temperature conditions. When a Type A or B pavement marking is used instead of a Type D pavement marking due to the surface temperature being below the manufacturer's minimum application temperature, the Contractor will be paid at the contract unit price for Type D pavement marking. This shall include the Type A or B marking and any necessary eradication of the Type A or B pavement marking.

3. **Type D, Class III contrast pavement markings** shall be used for all longitudinal temporary pavement markings on bridge decks and hydraulic cement concrete riding surfaces if all of the following are met:

- The road has a speed limit of 45 MPH or greater.
- The hydraulic cement concrete riding surface in question is at least 200 feet in length.
- The temporary markings are planned for at least 30 days of use.

Type D, Class III contrast markings are not required for any markings that are parallel to and within one foot of existing guardrail or other longitudinal barrier.

4. **Type E pavement markings** shall be used to cover existing markings in accordance with paragraph (l) herein.

5. **Flexible Temporary Pavement Markers (FTPMs)** may be used to simulate a temporary pavement marking line on the final surface, as an interim measure until the permanent pavement marking can be installed. FTPMs shall not be used in substitution for lines slated to be in place for more than 30 days.

FTPMs shall conform to Section 235 and shall consist of products from the Department's Approved List 22. All FTPM's shall be new product. FTPMs are suitable for use up to one year after the date of manufacture when stored in accordance with the manufacturer's recommendations.

FTPMs shall include a removable material covering the reflective lens to protect the lens from being obscured or damaged during the paving operation.

FTPM spacing shall be as follows:

- When simulating solid lines, the FTPMs shall be placed every 20 feet.
- When simulating double lines, pairs of side-by-side FTPMs shall be placed every 20 feet.
- When simulating broken lines with a 10-foot-skip/30-foot-gap pattern, 3 FTPMs shall be used per skip (5 feet between each FTPM), with a 30-foot gap between simulated skips.
- When simulating dotted lines with a 3-foot skip/9-foot-gap pattern, 2 FTPMs shall be used per skip (3 feet between the two FTPMs), with a 9-foot gap between simulated skips.

FTPMs shall not be used to simulate transverse lines, symbol/message markings, or dotted lines with 2-foot dot/6-foot-gap pattern.

The color of FTPM units and their reflective surfaces shall be the same color (white or yellow) as the temporary pavement markings they are being used in substitution for.

FTPMs shall be installed at the same locations that permanent pavement markings will be installed.

For surface treatment, slurry seal or latex emulsion treatment operations, the appropriate FTPMs with protective covering shall be installed before placing the new treatment. The lens protective covering shall be kept in place during the final surface placement to protect the lens from being obscured or damaged by the paving operation. Upon completion of surface treatment, slurry seal or latex emulsion treatment placement, the Contractor shall remove the protective covering from the reflective lens of the FTPMs before leaving the work site. Failure to remove such covering shall result in the non-payment for that portion type (skip or solid) of temporary pavement marking.

For plant mix operations, the appropriate FTPMs shall be installed on the newly placed pavement after the pavement is thoroughly compacted and has cooled to the FTPM manufacturer's recommended temperature for installation.

The Contractor shall maintain the FTPMs until the permanent pavement markings are installed. Damaged or missing FTPMs shall be replaced within 24 hours of discovery at the Contractor's expense with new FTPMs of the same manufacturing type, color, and model. No more than one FTPM may be damaged or missing out of every skip line or dotted line simulated segment. No two consecutive FTPMs may be damaged or missing on a simulated solid line or double line application, and no more than 30% of the FTPMs may be damaged or missing on any measured 100-foot segment of simulated solid line.

Once applied, FTPMs will be considered for a single use. If a FTPM requires replacement before installation of permanent pavement markings, it shall be properly disposed of and replaced with a new FTPM at no additional cost to the Department.

FTPMs shall be removed and properly disposed of when permanent pavement markings are installed. Used FTPMs removed from the pavement, including all containers, packaging, damaged FTPM's and all other miscellaneous items of waste, shall be appropriately disposed of in accordance with Section 106.04.

Section 512.03(l) – **Eradicating Pavement Markings** is replaced with the following:

Eradicating Pavement Markings: Markings that may conflict with desired traffic movement, as determined by the Engineer, shall be eradicated as soon as practicable: either immediately before the shifting of traffic or immediately thereafter and before the conclusion of the workday during which the traffic shift is made. Work shall be done in accordance with Section 704 except as noted herein.

The Contractor shall perform eradication by grinding, blasting, or a combination thereof. Blasting may be performed using water blasting, sand blasting, hydroblasting (combination of sand and water), or shot blasting. Water blasting and hydroblasting shall be done with equipment that includes a vacuum recovery system and capability to adjust the water pressure.

The Contractor may submit other methods for eradication for the Engineer's approval; however, the Department will not permit obscuring existing pavement markings with black paint or asphalt as a substitute for removal or obliteration. The Contractor shall minimize roadway surface damage when

performing the eradication. The Contractor shall repair the pavement if eradication of pavement markings results in damage to or deterioration of the roadway presenting unsafe conditions for motorcyclists, bicyclists, or other road users. Pavement repair, when required, shall be performed using a method approved by the Engineer.

The Contractor shall ensure workers are protected in accordance with Section 107.17 when eradicating pavement markings.

The Contractor shall vacuum or collect the eradication residue (removed markings, debris, and water) during and immediately after the eradication operation. Dust shall be collected during the entire operation. The Contractor shall ensure that no debris enters inlets or waterways.

Eradication residue from the removal of any pavement markings is considered to be a nonhazardous waste material and shall be disposed of in a properly permitted waste disposal facility in accordance with applicable state and federal laws and regulations. The Department does not require Contractor testing of the eradication residue for the eight Resource Conservation Recovery Act metals.

When markings are removed for lane shifts, transitions, or other areas or conditions required in the VWAPM, 100% of the pavement marking shall be removed.

Type E pavement markings may be used to cover existing markings instead of eradication on asphalt concrete surfaces. The Contractor shall use this material to cover markings as indicated in the Plans or as directed by the Engineer. Type E pavement marking shall be applied in accordance with the manufacturer's recommendations. Type E markings shall not be adhered to the pavement for more than 120 days. Type E markings shall not be used on HCC surfaces or bridge decks.

When eradicating symbols and messages, the entire theoretical box bounding the outermost limits of the markings shall be uniformly eradicated.

Eradication of 24" lines shall be considered nonlinear marking eradication.

Section 512.03(m) – Temporary Pavement Markers is renamed **Temporary Raised Pavement Markers** replaced with the following:

Temporary Raised Pavement Markers shall be installed with temporary pavement markings where required by the VWAPM and where directed by the Engineer. Temporary raised pavement markers shall not be used with Type E markings.

Temporary raised pavement markers shall be installed at the spacing required by the VWAPM, and as shown on Standard Drawing PM-8. . The Contractor may install two one-way markers instead of each two-way marker at no additional cost to the Department.

Temporary raised pavement markers shall be installed with a hot applied bitumen adhesive, except epoxy may be used on hydraulic cement concrete roadways and non-final surfaces of asphalt concrete roadways. Pavement damage caused by removing markers shall be repaired in kind by the Contractor at no additional cost to the Department.

The Contractor shall replace damaged, ineffective, or missing temporary raised pavement markers upon notification by the Engineer at no additional cost to the Department. Markers damaged by the

Department's snow removal operations or other maintenance and construction operations, however, will be paid for at the contract unit price.

Section 512.03(p) –Temporary Pavement Message and Symbol Markings is replaced with the following:

Temporary Pavement Message and Symbol Markings shall be the color, shape, and size required by the MUTCD, Standard Drawing PM-10, and the Plans. The Contractor shall install message and symbol markings in accordance with MUTCD, Section 704, the VWAPM, and the Standard Drawings.

Temporary pavement message and symbol markings shall be installed and maintained using the material specified on the Plans in accordance with Section 512.03(k).

Pavement message/symbol markings shall be installed at locations shown on the Plans and at locations designated by the Engineer.

Temporary pavement message markings shall be maintained in accordance with Section 512.03(k). Retroreflective measurements conforming to Section 512.03(k) shall be taken out of the wheel path locations. The pavement message/symbol marking shall be replaced when the average of the three readings for the symbol/message is below 100 mcd/sf/fc.

Section 512.03(q) – Type 3 Barricades is replaced as follows:

Type 3 Barricades: Type 3 barricades shall conform to NCHRP Report 350, Test Level 3, or MASH. Type 3 barricades shall be selected from those shown on the Department's Traffic Control Device Pre-Approval List. The Contractor shall provide a certification letter stating the brands and models of Type 3 barricades from the list proposed for the project. Instead of using Type 3 barricades on the listing, the Contractor may use other brands and models, if he submits a copy of the FHWA acceptance letter indicating the proposed substitutes complies with Test Level 3 of NCHRP Report 350 or MASH before use.

Type 3 Barricades shall be installed and ballasted in accordance with the VWAPM.

Section 512.03(r) – Truck-mounted or trailer mounted attenuators is replaced as follows:

Truck-mounted or trailer-mounted attenuators (TMAs): Truck-mounted and trailer-mounted attenuators manufactured on or prior to December 31, 2019 may be used if they are in good working condition, conform to Test Level 3 of NCHRP Report 350 or MASH, and are a product shown on the Department's Approved Lists for NCHRP-350 or MASH Approved Products. TMAs manufactured after December 31, 2019, shall conform to MASH Test Level 3 and shall be a product shown on the Department's Approved List for MASH Approved Products.

The Contractor shall submit catalog cuts/brochures of the TMA and a copy of the certification letter documenting NCHRP 350/MASH compliance of the specific TMA before their use on the project. TMAs shall be permanently identified with a device-specific manufacturers' identification number by stamping or marking with a durable weather resistant material in accordance with § 33.2-274.1 of the Code of Virginia.

The weight of the support vehicle shall be as recommended by the manufacturer of the Truck/ Trailer-mounted attenuator. The Contractor shall provide a copy of the manufacturer's recommendations to the Engineer, a copy of the original weigh ticket for the support vehicle, and a self-certification letter

stating the support vehicle has not been altered since the original weight ticket was issued. The weigh ticket shall contain adequate information to identify the ticket with the applicable support vehicle. A copy of the self-certification and weigh ticket shall be available in the support vehicle at all times and upon request.

Additional weight may be added to the support vehicle to achieve the range recommended by the manufacturer of the Truck/Trailer-mounted attenuator provided the total weight is properly balanced without overloading any one axle and is within the Gross Vehicle Weight Recommendation of the support vehicle. The added weight shall be securely attached to the support vehicle to prevent movement during an impact or movement of the vehicle. The additional weight and attachment method shall be self-certified by the Contractor and a copy of the self-certification letter shall be with the support vehicle at all times or a final stage manufacturer's certification sticker may be placed on the inside door of the altered vehicle.

The Truck/Trailer-mounted attenuator shall be no less than 72 inches wide and no more than 96 inches wide. There shall be no additional devices such as signs, lights, and flag holders attached to the Truck/Trailer-mounted attenuator except those that were tested on the Truck/Trailer-mounted attenuator and provided by the manufacturer of the Truck/Trailer-mounted attenuator.

The support vehicle shall have at least one vehicle warning light functioning while in operation in accordance with the VWAPM. When allowed by the VWAPM, an electronic arrow operated in the caution mode may be used with the vehicle warning light. When installing and removing lane closures on a multilane roadway as well as when performing mobile operations, the support vehicle shall be equipped with both vehicle warning lights and an arrow board.

The support vehicle shall be operated and parked in accordance with the manufacturer's recommendations.

Limitations: Traffic control devices shall not be installed from or removed to the Truck/Trailer-mounted attenuator support vehicle. When the Truck/Trailer-mounted attenuator is deployed there shall be no unsecured material in the bed of the support vehicle except the additional secured weight or truck-mounted devices such as an arrow board, a changeable message sign, or truck mounted signs. There shall also be no additional devices such as signs, lights, and flag holders attached to the Truck/Trailer-mounted attenuator except those that were tested on the Truck/Trailer-mounted attenuator and provided by the manufacturer of the Truck/Trailer-mounted attenuator.

If the Truck/Trailer-mounted attenuator is impacted, resulting in damage that causes the unit to be ineffective, all work requiring the use of the Truck/Trailer-mounted attenuator shall cease until such time that repairs can be made, or the Contractor provides another acceptable unit.

Section 512.03(s) – Portable Changeable Message Signs is amended to replace the second and third paragraphs with the following:

The sign shall be capable of sequentially displaying at least 2 phases of 3 lines of text each with appropriate controls for selection of messages and variable off-on times. Trailer-mounted PCMS shall be capable of displaying 3 lines of 8-character 18-inch text in a single phase, and vehicle-mounted PCMS shall be capable of displaying 3 lines of 8-character 10-inch text in a single phase. Each character module

shall at a minimum use a five wide by seven high pixel matrix. The message shall be composed from keyboard entries.

Access to PCMS control mechanisms shall be physically locked at all times when deployed to deter message tampering.

The message shall be legible in any lighting condition. Motorists should be able to read the entire PCMS message twice while traveling at the posted speed.

The sign panel support shall provide for an acceptable roadway viewing height that shall be at least 7 feet from bottom of sign to crown of road.

Section 512.03(w) – Portable Temporary Rumble Strips (PTRS) is replaced as follows:

Portable Temporary Rumble Strip (PTRS):

A PTRS may be made of rubber or recycled rubber. It shall have a recessed, raised or grooved design to prevent movement and hydroplaning. PTRS color shall be in accordance with the VWAPM.

A PTRS shall consist of interlocking or hinged segments of equal length that prevent separation when in use. The combined overall usable length of the PTRS shall be between 10 feet 9 inches and 11 feet. The width of the PTRS shall be 12 to 13 inches. PTRS shall be between 5/8 inch and 1.0 inch in height. The weight of each roadway strip shall be between 100 and 120 pounds. The leading and departing edge taper shall be between 12 and 15 degrees.

Each roadway length of the PTRS shall have either a minimum of one cutout handle in the end of the rumble strip, or an interlocking segment which can be used as a handle for easy deployment or removal.

The manufacturer of the PTRS shall provide a signed affidavit that states the PTRS is able to withstand being run over by an 80,000-pound vehicle and retain its original placement with minor incidental movement of 6 inches or less during an 8 hour deployment. Incidental movement of the PTRS shall be parallel with other rumble strips in an array but shall not move so that its placement compromises the performance and safety of the other rumble strips, workers, or the traveling public.

The PTRS shall be installed in accordance with manufacturers installation instructions, without the use of adhesives or fasteners.

PTRS Placement shall be in accordance with the VWAPM.

Section 512.04 – Measurement and Payment is amended to replace the 13th paragraph with the following:

Impact attenuator service will be measured in units of each and will be paid for at the Contract each price for the type specified. This price shall include installing, maintaining, and removing impact attenuator and object marker. Impact attenuators used with barrier openings for equipment access will not be measured for separate payment, but the cost thereof shall be included with other appropriate items. When impact attenuator service is moved to a new location, as directed, or approved by the Engineer, the relocated terminal will be measured for separate payment. Payment for impact attenuator service will not be made until the work behind the corresponding barrier service is actively pursued.

Section 512.04 – Measurement and Payment is amended to replace the 16th paragraph with the following:

Temporary pavement markings will be measured in linear feet and will be paid for at the contract linear foot price for the type, class and width specified. This price shall include marking materials, glass beads, adhesive, preparing the surface, maintaining, removing removable markings when no longer required, inspections, and testing.

If the Contractor uses FTPMs to simulate the temporary pavement marking, they will be measured in linear feet and paid for at the linear foot price for the temporary marking material being simulated. That measurement shall represent all FTPMs required for that simulated line marking. No additional payment will be made if the Contractor elects to remove FTPMs and install other temporary pavement markings. This cost shall include furnishing, installing, and maintaining the FTPMs, removable covers, surface preparation, quality control tests, daily log, guarding devices, removal, and disposal.

Section 512.04 – Measurement and Payment is amended to replace the 21st paragraph with the following:

Eradication of existing nonlinear pavement markings will be measured in square feet based on a theoretical box defined by the outermost limits of the nonlinear pavement markings as defined in Standard Drawing PM-10. Nonlinear pavement markings shall include but not be limited to, arrows, images, symbols, and messages. Eradication of existing nonlinear pavement markings will be paid for at the contract unit price per square foot. This price shall include removing nonlinear pavement markings, cleanup, and disposing of residue.

Section 512.04 – Measurement and Payment is amended to replace the 30th paragraph with the following:

Portable Temporary Rumble Strip (PTRS) Array will be measured in Days per array and will be paid for at the Contract Day price. An Array shall consist of three rumble strips. This price shall include installing, maintaining, removing devices when no longer required, and relocating throughout the day.

Section 512.04 – Measurement and Payment is amended by revising the Pay Item Table as follows:

The following pay items are removed:

Pay Item	**Pay Unit**
Portable temporary rumble strip	Each

The following pay items are inserted:

Pay Item	**Pay Unit**
Portable temporary rumble strip array	Day

4.7. SS704-002020-02

May 6, 2022

2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS

SECTION 704 – PAVEMENT MARKINGS AND MARKERS

SECTION 704 – PAVEMENT MARKINGS AND MARKERS of the Specifications is amended as follows:

Section 704.02 – Materials is amended to replace the first paragraph with the following:

For Type B, Class VI pavement marking materials that are to be applied to latex emulsion or slurry seal surfaces, the selected Type B, Class VI manufacturer shall be a manufacturer that approves and warranties their product for application on that type of surface.

Section 704.03 – Procedures is amended to replace the second paragraph with the following:

The Contractor shall have a certified Pavement Marking Technician present during all temporary pavement marking, permanent pavement marking, and pavement marker operations, except Flexible Temporary Pavement Marker (FTPM) installation.

Section 704.03 – Procedures is amended to replace the fourth through tenth paragraph with the following:

If the Contractor cannot have permanent pavement markings installed within the time limits specified, the Contractor shall install and maintain temporary pavement markings within the same time limits at no additional cost to the Department until the permanent pavement markings can be installed. Installation, maintenance, and removal or eradication of temporary pavement markings shall be according to Section 512.

The Contractor may mark the locations of proposed permanent markings on the roadway by installing premarking materials. Premarkings may be accomplished by installing removable tape, chalk, or lumber crayons, except pavement markings such as stop lines, crosswalks, messages, hatching, etc., shall be premarked using chalk or lumber crayons. Premarkings for yellow markings may be white or yellow. Premarkings for other colors shall be white.

When tape is used as a premarking material, premarking shall consist of 4- inch by 4-inch-maximum squares or 4-inch-maximum diameter circles spaced at 100-foot minimum intervals in tangent sections and 50-foot minimum intervals in curved sections. At locations where the pavement marking will switch colors (e.g., gore marking) the ends of the markings may be premarked regardless of the spacing.

When the Contractor uses chalk or lumber crayon as a premarking, the entire length of the proposed pavement marking may be premarked.

Premarkings shall be installed so their installation will not affect the adhesion of the permanent pavement markings. When removable tape is used as the premarking material and the lateral location of such premarkings to location of the final pavement markings exceeds 6 inches, the tape shall be removed at no additional cost to the Department.

The Contractor shall exercise caution and protect the public from damage while performing pavement marking operations. The Contractor shall be responsible for the complete preparation of the pavement surface, including, but not limited to, removing dust, dirt, loose particles, oily residues, curing compounds, concrete laitance, residues from eradication, and other foreign matter immediately before

installing pavement markings. The pavement surface shall be clean and dry at the time of pavement marking installation and shall be tested in accordance with VTM 94 before permanent installation, with the VTM 94 test results noted on Form C-85. The Contractor shall provide the equipment indicated in VTM 94 that are needed to perform the moisture test before application.

Section 704.03 – Procedures is amended by replacing the thirteenth paragraph with the following:

Non-truck mounted equipment shall be regulated to allow for calibration of the amount and type of material applied.

Section 704.03 – Procedures is amended to replace the eighteenth paragraph with the following:

Glass beads and retroreflective optics shall be applied at the rate specified herein or as specified in the Department's Approved List for the specific pavement marking product. Beads and optics shall be evenly distributed over the entire lateral and longitudinal surface of the marking. The Contractor shall apply beads to the surface of liquid markings with a bead dispenser attached to the applicator that shall uniformly dispense beads simultaneously on and into the just-applied marking. The bead dispenser shall be equipped with a cut-off control synchronized with the applied marking material cut off control so that the beads are applied totally on the marking. Beads shall be applied while the liquid marking is still fluid, resulting in approximately 60% embedment in the marking's surface. Beads installed on crosswalks and stop lines on roadways with curbs only (no gutter) may be hand applied for two feet at the end of each line next to the curb with 100 percent of the beads embedded 50% to 60% into the marking's surface.

Section 704.03(a)1 – Type A markings is replaced with the following:

Type A markings shall be applied in accordance with the manufacturer's installation instructions. When applying atop existing pavement markings, the existing marking shall first be swept or eradicated to the extent necessary to ensure that the surface of the existing marking is clean, chalk free (not powdery), and well adhered.

Glass beads for Type A, Class I markings shall be AASHTO M 247 Type 1 Beads applied at a minimum rate of 6 pounds per gallon of paint

Retroreflective optics for Type A, Class II markings shall be applied as noted in the Department's Approved List 20 for the selected pavement marking product.

The Contractor may substitute Type A, Class I cold weather paint (traffic paint designed for application at temperatures below 40 °F) for Type A, Class I conventional paint at no additional cost to the Department. Cold weather paint shall be from the Department's Approved List 20.

Section 704.03(a)2 – Type B markings is amended to replace the third paragraph with the following:

Non–truck mounted equipment for application of thermoplastic material shall include an extrude die with a burner, temperature controller, agitator, and mechanical bead applicator to allow for the correct amount of material to be applied.

Section 704.03(a)2a – Thermoplastic (Class I) is amended to replace the fourth through sixth paragraphs with the following:

Thermoplastic shall not be applied over existing pavement markings of materials other than paint or thermoplastic, unless the existing marking is 90 percent percent worn away or eradicated. When applying thermoplastic over existing paint or thermoplastic, the existing marking shall first be swept or eradicated to the extent necessary to ensure that the surface of the existing marking is clean, chalk free (not powdery), and well adhered.

Thermoplastic marking material shall be applied at thickness of 90 mils (± 5 mils) above the riding surface, whether dense or open graded surface.

Glass beads and retroreflective optics shall be surface applied at the rate of 10 pounds per 100 square feet unless specified otherwise on the Materials Division's Approved Products List 43 for the specific thermoplastic product.

Section 704.03(a)2b – Preformed thermoplastic (Class II) is amended to replace the first and second paragraphs with the following:

Preformed thermoplastic (Class II) material shall be installed in accordance with the manufacturer's installation instructions. A primer or sealer manufactured by or recommended by the preformed thermoplastic manufacturer shall be applied to all hydraulic cement concrete surfaces and to asphalt concrete surfaces in accordance with the manufacturer's installation instructions.

Preformed thermoplastic shall not be applied over existing pavement markings of materials other than paint or thermoplastic, unless the existing marking is 90 percent worn away or eradicated. When applying preformed thermoplastic over existing paint or thermoplastic, the existing marking shall first be swept or eradicated to the extent necessary to ensure the surface of the existing marking is clean, chalk free (not powdery), and well adhered.

Permanent transverse rumble strips shall be applied using two strips of white Type B, Class II material. The bottom strip shall be 250 mils thick and 4 inches wide, and the top strip shall be 125 mils thick and 2 inches wide (centered atop the bottom strip), unless noted otherwise in the plans. Transverse rumble strips shall be installed in arrays as per the Standard Drawings and the plans.

Section 704.03(b) – Pavement messages and symbols markings is amended to replace the second paragraph with the following:

Surface temperature at time of application shall be in accordance with manufacturer's installation instructions. If the installation instructions do not specify minimum surface temperature, then the markings shall not be installed unless the surface temperature at time of application is 50°F or higher. Surface temperature requirements shall not be considered met if the temperature is forecasted to drop below the minimum within two hours of application. The Contractor may heat the pavement for a short duration to dry the pavement surface and bring the surface temperature to within the allowable temperatures for pavement marking installation, at no extra cost to the Department. Heat torch temperatures shall not exceed 300°F. The Contractor shall monitor pavement temperature to ensure it does not rise above 120°F at any time. Any damage to the pavement shall be promptly repaired at no extra cost to the Department.

Message and symbol markings include, but shall not be limited to, those detailed in Standard Drawing PM-10.

The sizes and shapes of symbols and characters shall match the size and shape specified in Standard Drawing PM-10 or elsewhere in the Contract. Hand-drawn or "stick" symbols or characters will not be allowed.

Table VII-3 is replaced with the following:

TABLE VII-3

Pavement Markings

Type	**Class**	**Name**	**Film Thickness (mils)**	**Pavement Surface**	**Application Limitations**	**Appr. List No.**
A	I	Conventional or Cold-Weather Traffic Paint	15 ± 1 when wet	AC HCC	May be applied directly after paving operations	20
A	II	High Build Traffic Paint	25 ± 2 when wet	AC HCC	May be applied directly after paving operations	20
B	I	Thermoplastic Alkyd	90 ± 5	AC HCC	May be applied directly after paving operations	43
	I	Thermoplastic Hydrocarbon	90 ± 5 when dry	AC HCC	Do not apply less than 30 days after paving operations	43
	II	Preformed Thermoplastic	120-130	AC HCC	Manufacturers installation instructions	73
	III	Epoxy resin	20 ± 1 when wet	AC HCC	Manufacturers installation instructions	75
	IV	Plastic-backed preformed Tape	60 - 120	AC HCC	Manufacturer's installation instructions	17
	VI	Patterned preformed Tape	20 min[1] 65 min[2]	AC HCC	(Note 4)	17
	VII	Polyurea	20 ± 1	AC HCC	Manufacturer's installation instructions	74
D	III	Wet Reflective Removable tape	(Note 3)	AC HCC	Temporary pavement marking	17

E		Removable black tape (Non-Reflective)	(Note 3)	AC	Temporary pavement marking for covering existing markings	17

[1]Thinnest portion of the tape's cross section.

[2]Thickest portion of the tape's cross section.

[3]In accordance with manufacturer's installation instructions.

[4]In accordance with the manufacturer's installation instructions, except that Type B, Class VI markings on new plant mix asphalt surfaces shall be inlaid into the freshly installed asphalt surface and not surface-applied.

Section 704.03(d)1 – Snowplowable raised pavement markers is renamed **Section 704.03(d)1 – Inlaid Pavement Markers** and replaced as follows:

Inlaid Pavement Markers shall be installed with retroreflectors with front-side and back-side colors as per Standard Drawing PM-8.

The Contractor shall not install markers on existing bridge decks. Inlaid Pavement Markers shall be installed on new bridge decks where required by the Plans.

Inlaid Pavement Markers shall be placed in relation to pavement joints and cracks as follows:

- In existing Asphalt Concrete pavement, new or existing Hydraulic Cement Concrete pavement, and bridge decks, the edge of the groove shall be at least 2 inches from pavement joints and cracks, ensuring that the finished line of markers is straight in accordance with the tolerance for pavement markings specified in Section 704.03 of the Specifications. Offset from the longitudinal joint shall take precedence over straightness of the line of markers.
- In new Hydraulic Cement Concrete pavement or when installed in conjunction with new latex modified microsurfacing or slurry seal treatments, the edge of the groove shall be at least 2 inches from all longitudinal and transverse surface course pavement joints and 1 inch maximum off alignment from the corresponding pavement marking line. The finished line of markers shall be straight in accordance with the tolerance for pavement markings specified in Section 704.03 of the Specifications. Straightness of the line of markers and alignment with the corresponding pavement marking line takes precedence over offset from the surface course joint.

Retroreflectors shall be affixed to holders, using an adhesive from the Department's Approved List 22 (Inlaid Pavement Markers) prior to installation.

Inlaid Pavement Markers shall be installed as per Standard Drawing PM-8.

Tapered grooves and plunge cuts shall be cut using diamond blades that can accurately control the groove dimensions, resulting in smooth uniform tapers and smooth groove bottoms and ensuring the pavement does not tear or ravel. The Contractor shall remove all dirt, grease, oil, loose or unsound layers, and any other material from the groove which would reduce the bond of the adhesive. Pavement surfaces shall be maintained in a clean and dry condition until the marker is placed.

Holders shall be installed in the same shift as grooving.

The epoxy adhesive shall be thoroughly mixed until it is uniform in color and applied in accordance with the manufacturer's installation instructions. The Contractor shall partially fill the plunge cut with sufficient epoxy adhesive such that the epoxy adhesive bed area is equal to the bottom area of the holder. The Contractor shall then set the holder in the epoxy adhesive such that the breakaway tabs are resting on the road surface, the holder is centered in the cut, and then fill in additional epoxy adhesive if necessary so the entire perimeter of the holder is completely surrounded in epoxy, with the epoxy level with the edge of the holder in accordance with the manufacturer instructions.

The Contractor shall remove all adhesive and foreign matter from the face of the retroreflector or replace the retroreflector if adhesive and foreign matter cannot be removed. The marker shall be replaced if it is not properly positioned and adhered in the plunge cut.

Section 704.03(d)2 – Raised Pavement Markers is renamed **Nonplowable Raised Pavement Markers** and is replaced with the following:

Nonplowable raised pavement markers shall be bonded to the surface in accordance with the manufacturer's installation instructions. The bonding material shall be from the Department's Approved List 22 for the specific marker.

Section 704.04 – Measurement and Payment is amended to replace the fifth paragraph with the following:

Pavement markers will be measured in units of each for the type specified and will be paid for at the contract unit price per each. This price shall include surface preparation, furnishing, installing, prismatic retroreflectors, pavement cutting, adhesive, holders, quality control tests, and daily log.

Section 704.04—Measurement and Payment is amended by revising the Pay Item Table as follows:

The following pay items are removed:

Pay Item	**Pay Unit**
Pavement message marking (Message)	Each or Linear Foot

The following pay items are inserted:

Pay Item	**Pay Unit**
Pavement message marking (Message, Type, or class material)	Each or Linear Foot

5. Section D - TOV Public Works Department Construction Contract General Conditions

Town of Vienna Public Works Department Construction Contract General Conditions

5.1. Introduction to Terms

DEFINITIONS

a. The terms "Town" and "Contractor" shall mean the respective parties to the Contract. They shall be treated throughout the Contract Documents as though each were of the singular number and masculine gender. Only one Contractor is recognized as a party to this Contract.

b. The term "Engineer" means the Director, Department of Public Works, Town of Vienna, or designee. The designee may be identified in the Contract Documents as either the Town's appointed Project Officer or a contractor employed by the Town to perform construction services or project oversight.

c. The term "Town" means the Town Council of Vienna, Virginia.

d. The term "Subcontractor", as employed herein, shall include only those having a direct contract with the Contractor, and it shall include those who furnish
material worked to a special design according to the plans and specifications for this Work but shall not include those who merely furnish material not so worked.

e. The term "Contract Documents" means and shall include the Agreement and all the documents identified therein which shall include the Drawings and the Specifications and all modifications thereto properly incorporated in the Contract

(1) The term "Agreement" means the completed and signed Form of Contract agreement.

(2) The term "Drawings" means all drawings pertaining to the Contract, including the Contract Drawings and the Standard Details. (a) The term "Contract Drawings" means the drawings and construction notes which show the locations, character, dimensions, and details of the Work to be performed under the Contract. (b) The term "Standard Details" means the applicable drawings contained in the current edition of the Department of Public Works, Construction Standards and Specifications.

(3) The term "Specifications" means and shall include the Standard Specifications, Technical Specifications, the Special Provisions and all written agreements and instructions pertaining to the performance of the Work and to the quality of the materials to be furnished under the Contract.

(a) The term "Standard Specifications" means the applicable technical specifications contained in the current edition of the Department of Public Works, Construction Standards and Specifications.

(b) The term “Technical Specifications” means that part of the Contract Documents that describe the quality of materials, method of installation, standard of workmanship, and the administrative and procedural requirements for the performance of the Work under the contract.

(c) The term "Special Provisions" means the written statements modifying or supplementing the Standard Specifications or General Conditions for requirements or conditions peculiar to the Contract.

f. The term "Work" shall mean the services performed under this Contract including, but not limited to, furnishing labor, and furnishing and installing materials and equipment required to complete the Work specified in the Contract Documents. Where "as shown", "as indicated" "as detailed", or words or similar import are used, it shall be understood that the direction, requirements, permission, approval, or acceptance of the Engineer is intended unless stated otherwise. As used herein, "provide" shall be understood to mean "provide complete in place", that is, "furnish and install".

g. “Notice to Proceed” shall mean a written notice issued by the Town to the Contractor stating the Commencement Date, the date on which the contract time will commence, and on which the Contractor is to begin the prosecution of the Work required under the Contract. The Notice to Proceed will specify the Time for Completion of the Contract.

h. “Time for Completion” shall mean the number of consecutive calendar days after the Commencement Date stated in the Notice to Proceed which the Contractor has to complete all the Work under the Contract.

i. The term "Force Majeure" means an earthquake, flood, cyclone, or other cataclysmic phenomenon of nature. Rain, wind, or other natural phenomenon of normal intensity for the locality shall not be construed as a Force Majeure under this definition.

j. "Written notice" shall be deemed to have been duly served if delivered in person to the individual or to the member of the firm or to an officer of the corporation for whom it is intended or enclosed in a postage prepaid envelope addressed to the last known address of such other party and deposited in a U. S. Postal Service mail receptacle.

5.2. Drawings, Specifications, and Related Data

1. INTENT OF THE DRAWINGS AND SPECIFICATIONS

a. It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, unsuitable or excess material haulage and disposal, water, water haulage, light power, transportation, superintendence, temporary construction of all kinds, and other services and facilities of every nature whatsoever that are necessary to execute and deliver the Work, complete and usable within the scope of the Contract with all parts in working order, and all connections properly made.

b. 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 Engineer will be furnished to the Contractor when required for the Work.

c. Unless otherwise specifically noted, 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 their connection with other parts of the Work.

d. 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.

e. The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. In case of conflicting variance between the Contract Documents, the Specifications shall take precedence over the Drawings, the Special Provisions shall take precedence over the Specifications and the Drawings, and the Agreement shall take precedence over the Special Provisions, the Specifications and the Drawings. 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.

2. DISCREPANCIES AND ERRORS

If the Contractor discovers any discrepancies between the Drawings and Specifications and the site conditions or any errors or omissions in the Drawings or Specifications, the Contractor shall at once report them in writing to the Engineer. If the Contractor proceeds with any work that may be affected by such discrepancies, errors, or omissions, after their discovery, but before their correction, such work shall be at the Contractor's risk.

3. COPIES FURNISHED

Except as provided for otherwise, copies of the Drawings and Specifications reasonably necessary for the execution of the Work will be furnished to the Contractor. A limit of five (5) copies each of the Contract Drawings and Specifications will be provided to the Contractor without charge.

4. DOCUMENTS OF THE JOB

The Contractor shall keep on the site of the project a copy of the Drawings and Specifications including all authorized revisions and shall at all times give the Town and its authorized representatives access thereto.

5. OWNERSHIP OF DRAWINGS AND SPECIFICATIONS

All Drawings and Specifications and copies thereof furnished by the Town are the property of the Town and shall not be used on other projects. Upon completion of the project, all copies of the Drawings and Specifications except the signed Contract sets shall be returned to the Engineer.

6. SUBMITTALS

a. The term "submittals", as used herein, shall include fabrications, erection and setting drawings, manufacturers' standard drawings, schedules, descriptive literature, catalogs, brochures, performance and test data, wiring and control diagrams, and other descriptive data pertaining to the materials and equipment as required to demonstrate compliance with the Contract requirements.

b. The Contractor shall submit for the approval of the Engineer all submittals required by the specifications or requested by the Engineer. All such
submissions shall be made so as to cause no delay in the project, allowing reasonable time for review and checking by the Engineer.

c. Submittals shall be submitted in such number of copies that three copies may be retained by the Engineer after approval. Each submission shall be accompanied by a letter of transmittal in duplicate, listing the contents of the submission and identifying each item by reference to specification section or drawing. All submittals shall be clearly labeled with the name of the project and such information as

may be necessary to enable their complete review by the Engineer. Catalog plates and other similar material that cannot be so labeled conveniently shall be bound in suitable covers bearing the identifying data.

d. Submittals shall be accompanied by all required certifications and other such supporting material, and shall be submitted in such sequence or in such groups that all related items may be checked together. When submittals cannot be checked because a submission is not complete, or because shop drawings on related items have not been received by the Engineer, then such submittals will be returned without action or will be held, not checked, until the missing material is received. Incomplete or defective submittals shall not be considered to have been submitted.

e. Submittals shall have been reviewed by the Contractor and coordinated with all other related or affected work before they are submitted for approval and shall bear the Contractor's certification that the Contractor has checked and approved them as complying with all relevant information in the Contract Documents. Submittals submitted without such certification and coordination will be returned to the Contractor without action and will be considered not a formal submission.

f. If shop drawings show variations from the Drawings and Specifications because of standard shop practice or other reasons, the Contractor shall make specific mention of such variation in the Contractor's letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment; otherwise, the Contractor will not be relieved of the responsibility for executing the work in accordance with the Drawings and Specifications even though shop drawings have been approved.

g. The Engineer shall review the shop drawings with reasonable promptness. Review and/or approval of shop drawings will be general for conformance with the design concept of the Project and compliance with the information given in the Contract Documents, and will not include quantities, detailed dimensions, nor adjustments of dimensions to actual field conditions. Approval shall not be construed as permitting any departure from Contract requirements, as authorization of any increase in price nor as relieving the Contractor of the responsibility for any error in details, dimensions or otherwise that may exist.

7. SAMPLES

The Contractor shall submit, for the approval of the Engineer, all samples required by the specifications or requested by the Engineer. Samples shall be submitted in single units only, unless the Contractor desires additional units for the Contractor's own use. Each sample shall bear a label indicating the material represented the name of the producer and the title of the Project. Approval of a sample shall be only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents, and only for the characteristics or use named in such approval. Such approval shall not be construed to change or modify any Contract requirements or the Contract Price. Materials and equipment incorporated in the Work shall match the approved samples.

8. TESTS

Any specified laboratory tests of materials and finished articles shall be made by bureaus, laboratories or agencies approved by the Engineer and the certified reports of such tests shall be submitted to the Engineer. All costs in connection with the testing shall be borne by the Contractor. Failure of any material to pass the specified tests or any test performed by the Engineer, will be sufficient cause for

refusal to consider, under this Contract, any further materials of the same brand or make of that material. Samples of various materials delivered on the site or in place may be taken by the Engineer for testing. Samples failing to meet the Contract requirements will automatically void previous approvals of the items tested.

9. MATERIALS AND EQUIPMENT LIST

a. At least ten (10) working days before the start of construction the Contractor shall submit to the Engineer for approval a complete list of materials and equipment proposed for use in connection with the project. Partial lists submitted from time to time will not be considered.

b. After any material or piece of equipment has been approved, no change in brand or make will be permitted unless satisfactory written evidence is presented to prove that the manufacturer cannot make scheduled delivery of the approved material, or that material delivered has been rejected and the substitution of a suitable material is an urgent necessity, or that other conditions have become apparent which indicate that approval of such other material is in the best interest of the Town.

10. STANDARDS, SUBSTITUTIONS

a. Any material specified by reference to the number, symbol or title of a specific standard, such as a Commercial Standard, a Federal Specification, a Trade Association Standard, or other similar standard, shall comply with the requirements in the latest revision of the standards or specification and any amendment or supplement, except as limited to type, class or grade, or as modified in such reference. The standard referred to, except as modified in the Specifications, shall have full force and effect as though printed in the Specifications. The Engineer will furnish, upon request, information as to how copies of the standards referred to may be obtained.

b. Reference in the Specifications or on the Drawings to any article, device, product, material, fixture, form or type of construction by name, make or catalog number shall be interpreted as establishing a standard of quality and shall not be construed as eliminating from competition other products of equal or better quality by other manufacturers where fully suitable, as approved by the Engineer. Applications for approval of substitutions for the specified items will be considered only upon request of the Contractor, not of individuals, trades or suppliers, and only for a specific purpose; no blanket approvals will be granted. No approval of a substitution shall be valid unless it is in written form and signed by the Engineer.

c. If any proposed substitution will affect a correlated function, adjacent construction or the work of other contractors, then the necessary changes and modifications to the affected work shall be considered as an essential part of the proposed substitution, to be accomplished by the Contractor without additional expense to the Town, if and when approved. Detail drawings and other information necessary to show and explain the proposed modifications shall be submitted with the request for approval of the substitution.

11. SURVEYS AND CONTROLS

Unless otherwise specified, the Contractor shall establish all baselines for the location of the principal component parts of the Work, establish a suitable number of benchmarks adjacent to the Work, and develop all detail surveys necessary for construction. The Contractor shall carefully preserve

benchmarks, reference points and stakes, and in the case of destruction thereof by the Contractor or due to the Contractor's negligence or the negligence of any subcontractor, the Contractor shall be responsible for expense and damage resulting therefrom and shall be responsible for any mistakes that may be caused by the loss or disturbance of such bench marks, reference points and stakes.

12. AS-BUILT DRAWINGS

As-built drawings shall be the normal function of the Engineer, unless specified in the Contract Documents to be the responsibility of the Contractor. If so, the Contractor shall mark up one set of prints of the applicable Contract drawings to portray as-built construction. The prints shall be neatly and clearly marked to show all variations between the Work actually provided and that indicated on the Contract Drawings, and 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. These drawings shall be marked promptly at the completion of the project and shall be turned over to the Engineer within thirty (30) days of completion of the project.

5.3. Town, Engineer and Contractor Relations

1. STATUS OF ENGINEER

The Engineer shall be the Town's representative during the construction period. The Engineer shall have authority to suspend the Work whenever such suspension may be necessary in the responsible opinion of the Engineer to ensure the proper execution of the Contract. The Engineer shall also have authority to reject all work and materials that do not conform to the Contract and to decide questions that arise in the execution of the Work.

2. ENGINEER'S DECISIONS

The Engineer will, within a reasonable time, make decisions on all matters relating to the execution and progress of the Work.

3. DISPUTES

a. All disputes arising under this Contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of Contract shall be submitted in writing to the Engineer for decision prior to beginning the work on which the claim is based. Such claims must set forth in detail the amount of the claim and shall state the facts surrounding it in sufficient detail to identify it together with its character and scope.

b. In any case where the Contractor deems extra compensation is due him for work or materials not clearly covered in the Contract, or not ordered by the Engineer as additional work not specifically included in the Contract Documents, the Contractor shall notify the Engineer in writing of the Contractor's intention to make claim for such extra compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given, or the Engineer is not afforded proper facilities by the Contractor for keeping strict account of actual cost, then the Contractor hereby agrees to waive the claim for such extra compensation.

c. Contractual disputes shall be evaluated and decided by the Director of Public Works within 30 days of receipt of the claim or dispute. Their decision shall be final unless the Contractor files a claim with the Town Council pursuant to state law. Following the decision of Council on the claim, the Contractor may institute legal action in the Circuit Court.

d. The Contractor shall not cause a delay in the work pending a decision of the Engineer, Town Manager, Town Council, or court, except by prior written approval of the Engineer.

4. INSPECTION OF WORK

The Engineer and representatives of any public authority having jurisdiction shall, at all times, have access to the Work while in progress. The Contractor shall provide suitable facilities for such access and for proper observation of the Work and shall conduct all special tests required by the specifications, the Engineer's instructions, and any laws, ordinances, or the regulations of any public authority applicable to the Work.

5. INSPECTION OF MATERIALS

All articles, materials, and supplies purchased by the Contractor for the Work are subject to inspection by the Engineer upon delivery to the site. The Town reserves the right to return for full credit, at the risk and expense of the Contractor, all or part of the articles, materials, or supplies furnished contrary to specifications and instructions.

6. EXAMINATION OF COMPLETED WORK

If the Engineer requests it, the Contractor, at any time before acceptance of the Work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the Specifications. Should the work thus exposed or examined prove acceptable, then the uncovering or removing, and the replacing of the covering or making good of the parts removed shall be paid for as extra work but should the work so exposed or examined prove unacceptable, then the uncovering, removing and replacing shall be at the Contractor's expense.

7. SUPERINTENDENCE BY CONTRACTOR

The Contractor shall keep a competent superintendent and any necessary assistants on the Work at all times during its progress and such persons shall be satisfactory to the Engineer. The superintendent shall not be changed except on the Engineer's determination the superintendent is no longer satisfactory or except with the consent of the Engineer where the superintendent proves to be unsatisfactory to the Contractor and ceases to be in the Contractor's employment. The superintendent shall represent the Contractor in the Contractor's absence and all directions given to him shall be as binding as if given to the Contractor. In general, instructions by the Engineer shall be confirmed in writing, and always upon written request from the Contractor. The Contractor shall at all times enforce strict discipline and good order among the workers performing under this Contract and shall not employ on the Work any person not reasonably proficient in the Work assigned.

8. LANDS BY TOWN

The Town shall provide the lands shown on the Drawings upon which the Work under the Contract is to be performed and to be used for rights of way and for access. In case all of the lands, rights-of-way or easements have not been obtained as herein contemplated before construction begins, the Contractor shall begin its work on such lands and rights-of-way as the Town may have previously acquired.

9. LANDS BY CONTRACTOR

If the Contractor requires additional land for temporary construction facilities and for storage of materials and equipment other than the areas available on the site or right of-way, or as otherwise furnished by the Town, the Contractor shall provide such other lands and access thereto entirely at the Contractor's own expense and without liability to the Town. The Contractor shall not enter upon private property for any purpose without written permission.

10. PROTECTION OF WORK AND PROPERTY

a. The Contractor shall continuously maintain protection of all its work from damage and shall protect the Town's property from damage or loss arising in connection with this Contract. The Contractor shall make good any such damage, or loss, except such as may be caused by agents or employees of the Town.

b. The Contractor shall not place upon the Work, or any part thereof, any loads which are not consistent with the design strength of that portion of the Work.

c. The Contractor shall be responsible for the preservation of all public and private property, trees, monuments, etc., along and adjacent to the street and/or right of-way, and shall use every precaution to prevent damage to pipes, conduits and other underground structures, curbs, pavements, etc., except those to be removed or abandoned in place and shall protect carefully from disturbance or damage all monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed. Any damage which occurs by reason of the operations under this Contract shall be completely repaired by the Contractor at the Contractor's expense.

d. The Contractor shall shore, brace, underpin, secure, and protect, as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site that may be affected in any way by excavations or other operations connected with the work embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owned or other party before commencement of any work. The Contractor shall indemnify and save the Town harmless from any damages on account of settlements or loss of all damages for which the Town may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

e. In an emergency affecting the safety of life or of the Work, or of adjoining property, the Contractor, without special instruction or authorization from the Engineer or Town, is hereby permitted to act, at the Contractor's discretion, to prevent such threatened loss or injury, and the Contractor shall so act without appeal, if so instructed or authorized.

11. SEPARATE CONTRACTS

a. The Town reserves the right to let other contracts in connection with this project. The Contractor shall afford other contractors' reasonable opportunity for the delivery and storage of their materials and the execution of their work, and shall properly connect and coordinate its work with the work of other such contractors.

b. If any part of the Contractor's work depends, for proper execution or results, upon the work of any other contractor, the Contractor shall inspect and promptly report to the Engineer any defects in such work that renders it unsuitable for such proper execution and results. The Contractor's failure to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of the Contractor's work, except as to defects which may develop in other contractor's work after its execution.

c. If the Contractor or any of the Contractor's subcontractors or employees cause loss or damage to any separate contractor on the Work, the Contractor agrees to settle or make every effort to settle or compromise with such separate contractor. If such separate contractor sues the Town on account of any loss so sustained, the Town shall notify the Contractor, who shall indemnify and save the Town harmless against any expense, claim or judgment arising therefrom, including reasonable attorney's fees.

12. SUBCONTRACTS

a. The Contractor shall, within fifteen (15) days after execution of the Contract by the Town provide the Engineer, in writing, the names of all subcontractors proposed for the principal parts of the Work and for such others as the Engineer may direct and shall not employ any that the Engineer may, within a reasonable time, object to as incompetent or unfit after an appropriate determination of the subcontractor's ability. No proposed subcontractor will be disapproved except for cause.

b. The Contractor shall be as fully responsible to the Town for the acts and omissions of the Contractor's subcontractors as the Contractor is for the acts and omissions of persons directly employed by him.

c. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind subcontractors to the Contractor by the terms of the General Conditions of the Contract, Special provisions and other documents comprising the Contract insofar as such documents are applicable to the work of subcontractors.

d. Nothing contained in the Contract shall be construed to create any contractual relation between any subcontractor and the Town, nor shall it establish any obligation on the part of the Town to pay to, or see to the payment of any sums to any subcontractor.

13. ELIMINATED ITEMS

Should any item(s) in the Contract be determined unnecessary for the proper completion of the Work contracted, the Engineer may, upon written notice to the Contractor, eliminate such item(s) from the Contract. Payment will not be made for such item(s) so eliminated; except that the Contractor will be compensated for the actual cost of any work performed for the installation of such item(s) and the net cost of materials purchased before the item(s) was eliminated from the Contract, including freight and tax costs, as evidenced by invoice. No additional compensation will be made for overhead or anticipated profit.

5.4. Material and Workmanship

1. MATERIALS FURNISHED BY THE CONTRACTOR

Unless otherwise specified, all materials and equipment incorporated in the Work under the Contract shall be new. All workmanship shall be accomplished by persons qualified in the respective trades.

2. MANUFACTURER'S DIRECTIONS

Manufactured articles, material, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the manufacturer's directions as approved by the Engineer, unless herein specified to the contrary.

3. CUTTING, PATCHING, AND DIGGING

The Contractor shall do all cutting, fitting, or patching of the Contractor's work that may be required to make its several parts come together properly and fit it to receive or be received by work of other contractors as shown upon or reasonably implied by the Drawings and Specifications for the completed project and shall make good after them as the Engineer may direct. The Contractor shall not endanger any work by cutting, digging, or otherwise, and shall not cut or alter the work of any other contract except with the consent of the Engineer.

4. REJECTED WORK AND MATERIALS

a. All materials which do not conform to the requirements of the Contract Documents, are not equal to samples approved by the Engineer, or are in any way unsatisfactory or unsuited to the purpose for which they are intended, shall be rejected. Any defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause shall be removed, and the work shall be re-executed by the Contractor. The fact that the Engineer may have previously overlooked such defective work shall not constitute acceptance of any part of it.

b. If the Contractor fails to proceed at once with the replacement of rejected material and/or the correction of defective workmanship, when notified to do so by the Engineer, the Town may, by contract or otherwise, replace such material or correct such workmanship and charge the cost to the Contractor. This clause applies during the Contract Term and during any warranty or guarantee period.

c. If the Engineer deems it expedient not to require correction of work which has been damaged or not done in accordance with the Contract, an appropriate adjustment to the Contract Price may be made therefor.

5.5. Legal Responsibility and Public Safety

1. DIFFERING SITE CONDITIONS

The Contractor shall, within twenty-four hours after becoming aware of differing site conditions, and before the conditions are disturbed, give a written notice to the Engineer of subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or previously unknown physical conditions discovered at the site of an unusual nature and which differ materially from those ordinarily expected to be encountered at the site.

The Engineer will investigate the site conditions within twenty-four hours after receiving the notice. If the conditions do materially differ to the extent that an increase or decrease would result in the Contractor's cost of the work, or the time required for performing any part of the work under the contract, an equitable adjustment may be made under this clause and the Contract modified in writing accordingly.

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.

No request by the Contractor for an adjustment to the contract for differing site conditions shall be allowed if made after final payment under the contract.

2. PUBLIC CONVENIENCE

The Contractor shall at all times so conduct its Work as to ensure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the Work. Traffic shall be maintained by use of barricades and flagmen as directed by the Engineer and in accordance with the most current version of the Virginia Work Area Protection Manual. No road or street shall be closed to the public except with the permission of the Engineer and proper governmental authority. Fire hydrants on or adjacent to the Work shall be kept accessible to firefighting equipment at all times. Temporary provisions shall be made by the Contractor to ensure the use of sidewalks and the proper functioning of all gutters, drainage inlets, drainage ditches, and irrigation ditches, which shall not be obstructed except as approved by the Engineer.

3. SAFETY AND ACCIDENT PREVENTION

The Contractor shall comply with, and ensure that the Contractor's personnel and subcontracted personnel comply with, all current applicable local, state and federal policies, regulations and standards relating to safety and health, including, by way of illustration and not limitation, the standards of the Virginia Occupational Safety and Health program of the Department of Labor and Industry for General Industry and for the Construction Industry, the Federal Environmental Protection Agency Standards and the applicable standards of the Virginia Department of Environmental Quality.

The Contractor shall provide, or cause to be provided, all technical expertise, qualified personnel, equipment, tools and material to safely accomplish the work specified to be performed by the Contractor and subcontractor(s).

The Contractor shall identify to the Engineer at least one on-site person who is the Contractor's competent, qualified, and authorized person on the worksite and who is, by training or experience, familiar with policies, regulations and standards applicable to the work being performed. The competent, qualified and authorized person must be capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, shall be capable of ensuring that applicable safety regulations are complied with, and shall have the authority and responsibility to take prompt corrective measures, which may include removal of the Contractor's personnel from the work site.

The Contractor shall provide to the Engineer, at the Engineer's request, a copy of the Contractor's written safety policies and safety procedures applicable to the scope of work. Failure to provide this information within seven (7) days of the Engineer's request may result in cancellation of the award.

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.

The Contractor shall take or cause to be taken such additional safety and health measures as the Engineer may determine to be reasonably necessary. Machinery, equipment, and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention" published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws. The Contractor is directed to the "Rules and Regulations Governing Construction, Demolition and All Excavation" and adopted by the Safety Codes Commission of Virginia, 1966, or latest edition, covering requirements for shoring, bracing, and sheet piling of trench excavations.

4. CROSSING UTILITIES

When construction crosses highways, railroads, streets, or utilities under the jurisdiction of State, County, or other public agency, public utility, or private entity, the Contractor shall secure written permission where necessary from the proper authority before executing such new construction. A copy of such written permission must be filed with the Engineer before any work is started. The Contractor shall be required to furnish a release from the proper authority before final acceptance of the Work.

5. SANITARY PROVISIONS

The Contractor shall provide and maintain such sanitary accommodations for the use of the Contractor's employees and those of its subcontractors as may be necessary to comply with the requirements and regulations of the local and State departments of health and where additional accommodations are necessary to maintain a reasonably sanitary environment, then such additional accommodations shall be made as determined by the Engineer.

6. WARRANTY

All material provided to the Town shall be fully guaranteed by the Contractor against manufacturing defects within the period of the manufacturer's standard warranty. The Contractor shall make available copies of warranties on demand. Such defects shall be corrected by the Contractor at no expense to the Town. All work is guaranteed by the Contractor against defects resulting from the use of inferior or faulty materials or workmanship for one year from the date of final acceptance of the work by the Engineer in addition to and irrespective of any manufacturer's or supplier's warranty. No date other than the date of final acceptance may be established to govern the effective date of the Guaranty, unless that date is agreed upon by the Engineer and the Contractor in a signed writing.

7. INSPECTION, ACCEPTANCE AND TITLE OF MATERIALS

Inspection and acceptance by the Town will be at the work site in Vienna, Virginia and within ten (10) days of delivery unless otherwise provided for in the Contract. The Town will not inspect, accept, or pay for any materials stored off-site by the Contractor. Title and risk of loss or damage to all items shall be the responsibility of the Contractor until acceptance by the Town. The Town'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 Town reserves the right to conduct any tests or inspections it may deem advisable to assure that goods or services conform to the specification. 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.

8. CONTRACTOR'S TITLE TO MATERIALS

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 for payment.

9. WORK SITE DAMAGES

Any damage to finished surfaces resulting from work performed under this Contract shall be repaired to the Engineer's satisfaction at the Contractor's expense.

10. CLEANING UP

The Contractor shall remove and legally dispose of, as frequently as necessary, all refuse, rubbish, scrap materials and debris from the site to the extent they are the result of the Contractor's operations to the end that the site of the work shall present a neat, orderly, and workmanlike appearance at all times. At completion of the work, but before final acceptance, the Contractor shall remove and legally dispose of all surplus material, falsework, temporary structures including foundations thereof, and debris of every nature resulting from the Contractor's operations or resulting from any activity on the site related to the Contractor's operations and put the site in a neat, orderly condition; if the Contractor fails to do so, the Town shall have the right to remove and legally dispose of the surplus material, falsework, temporary structures including foundations thereof, and debris, put the site in a neat, orderly condition, and charge the cost to the Contractor.

5.6. Progress and Completion of Work

1. NOTICE TO PROCEED

Within thirty (30) days of execution of the Contract by the Town, the Contractor shall be given written Notice to Proceed with the Work. Such Notice to Proceed shall state the date on which the Work is to be commenced, and every calendar day thereafter shall be counted in computing the actual Time for Completion.

2. TIME FOR COMPLETION

It is hereby understood and mutually agreed by and between the Contractor and the Town 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. The Contractor agrees that the Work shall be started promptly upon receipt of a written Notice to Proceed 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.

3. USE OF COMPLETED PORTIONS

The Town shall have the right to take possession of and use any completed or partially completed portions of the Work, notwithstanding that the time for completing the entire Work or such portions may not have expired; but taking such possession and use shall not be deemed an acceptance of any work not done in accordance with the Contract Documents. If such prior use increases the cost or delays, the completion of remaining work, or causes refinishing of completed work, the Contractor shall be entitled to such compensation or extension of time or both as the Engineer may determine.

5.7. Measurement and Payment

1. PAYMENTS TO CONTRACTOR

The Town will make partial payments to the Contractor on the basis of a written estimate of the work performed during the preceding calendar month as approved by the Engineer.

a. Lump Sum Contract: The schedule of total prices of lump sum items in the accepted bid shall be used as a basis for preparing the estimates, and each partial payment shall represent the value, proportionate to the total amount of each lump sum item, of completed work and materials on the site to be incorporated in the work, less the aggregate of previous payments.

b. Unit Price Contract: The schedule of unit prices in the accepted bid shall be used as the basis for preparing the estimates and each partial payment shall represent the total value of all units of work completed, computed at the unit prices stated in the Contract, less the aggregate of previous payments.

2. PAYMENTS WITHHELD

The Engineer may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any certificate for payment to the extent necessary to protect the Town from loss on account of defective work not remedied. Any such withholding shall not result in any liability to the Contractor for damages.

3. CHANGES IN WORK

a. Lump Sum Contract

The Town, without invalidating the Contract, may order extra work or make changes by altering, adding to, or deducting from the Work, the Contract Sum being adjusted accordingly. All such work shall be executed under the conditions of the original Contract, except that any claim for modification of the Contract Time caused thereby shall be adjusted at the time of ordering such change.

(1) The Engineer shall have authority to make minor changes in the Work by verbal order when such changes do not involve extra cost and are not inconsistent with the purpose of the project. Otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order from the Town signed or countersigned by the Engineer, or a written order from the Engineer, and no claim for an addition to the Contract Sum shall be valid unless so ordered.

(2) The value of any such extra work or change shall be determined in one or more of the following ways: (a) by estimate and acceptance in a lump sum or (b) by actual cost and fixed fee.

(3) If none of the aforementioned methods is agreed upon the Contractor shall proceed with the work provided the Contractor receives an order as above. In such case, the Contractor shall keep and present in such from as the Engineer may direct, a correct account of the cost, together with vouchers. The Engineer shall certify to the amount due to the Contractor, including a reasonable lump sum allowance for overhead and profit. Pending final determination of value, payments on account of changes shall be made on the Engineer's certificate. A complete accounting of the extra cost shall be made within fifteen (15) days after completion of the work involved in the claim.

b. Unit Price Contract

The estimated quantities of work to be done and materials to be furnished under this Contract, shown in any of the documents, including the Proposal, are given only for use in evaluation of bids, and to indicate approximately the total amount of the Contract. The right is expressly reserved, except as may be otherwise specifically limited, to increase or decrease such quantities as may be deemed reasonably necessary or desirable by the Engineer to complete the Work covered by this Contract, and such increase or decrease shall in no way invalidate claims or liability for damages, except as provided for adjustment of the time for performance. The further right is reserved, except as may be otherwise specifically limited, to add work that is not covered by unit prices in the Contract Documents and that may be deemed reasonably necessary or desirable by the Town to complete the Work covered by this Contract. The value of such added work shall be established by one of the methods provided hereinbefore for Lump Sum Contract. The adjustment or time for performance shall be adjusted at the time of ordering the changes.

4. CLAIMS FOR EXTRA COST

If the Contractor claims that any instructions, by drawings or otherwise, involve extra cost under this Contract, the Contractor shall give the Engineer written notice thereof within fifteen (15) days after the receipt of such instruction, and in any event before proceeding to execute the work (except in emergency endangering life or property), and the procedure shall then be as provided for Changes in Work. No such claim shall be valid unless so made.

5. RELEASE OF LIENS

The Town, before making any payment including the final payment, if the Town deems such procedure necessary to protect the Contractor's interests, may require the Contractor to furnish a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof and if required in either case, an affidavit 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. The Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Town, to indemnify him against any lien. If any lien remains unsatisfied after all payments have been made, the Contractor shall refund to the Town all money that the latter may be compelled to pay in discharging such lien. However, the Town may make payments in part or in full to the Contractor without requiring the releases or receipts, and the payments so made shall not impair the obligations of any Surety or Sureties on any bond or bonds furnished under this Contract.

6. STIPULATED PRICES

The term “STIPULATED PRICE ITEM” means and includes an item of Work, unanticipated at the time of issuance of the solicitation for a Bid and determined to be executed, based on the actual field conditions during the progress of Work under the contract, mutually by the Engineer and the Contractor. The Unit Price for the “STIPULATED PRICE ITEM”, as identified in the “Stipulated Price Items” section of the Bid Form, is predetermined by the Town as the current reasonably workable rate for the Item inclusive of all necessary labor, equipment, materials, overheads (provision and installation), and the contractor’s profit. Work on the “STIPULATED PRICE ITEM” shall be carried out either at the written request of the Contractor followed by a written approval by the Engineer or at the written order by the Engineer to the Contractor. The payment for a “STIPULATED PRICE ITEM” shall be made by the Town to the Contractor at the related Unit Price specified in the ‘Stipulated Price Items’ section of the Bid Form on the same basis as the payment for any other regular Bid Item.

6. Section E - TOV General Terms & Conditions

Town of Vienna General Terms and Conditions

6.1. Vendor

THE GENERAL TERMS AND CONDITIONS WHICH FOLLOW APPLY TO ALL PURCHASES AND BECOME A DEFINITE PART OF EACH FORMAL INVITATION FOR BID, REQUEST FOR PROPOSALS, PURCHASE ORDER AND/OR OTHER AWARD ISSUED BY THE TOWN OF VIENNA, VIRGINIA, UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION DOCUMENTS. BIDDERS/OFFERORS OR THEIR AUTHORIZED REPRESENTATIVES ARE EXPECTED TO FULLY INFORM THEMSELVES AS TO THE CONDITIONS, REQUIREMENTS, AND SPECIFICATIONS BEFORE SUBMITTING BIDS/PROPOSALS; FAILURE TO DO SO WILL BE AT THE BIDDERS'/OFFERORS' OWN RISK AND THEY CANNOT SECURE RELIEF ON THE PLEA OF ERROR.

SUBJECT TO STATE, COUNTY AND LOCAL LAWS AND ALL RULES, REGULATIONS AND LIMITATIONS IMPOSED BY LEGISLATION OF THE FEDERAL GOVERNMENT, BIDS/PROPOSALS ON ALL SOLICITATIONS ISSUED BY THE PURCHASING OFFICE WILL BIND BIDDERS/OFFERORS TO APPLICABLE CONDITIONS AND REQUIREMENTS HEREIN SET FORTH UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION.

6.2. Clarification of Terms

If any prospective bidder/offeror has questions about the specifications or other solicitation documents, the prospective bidder/offeror should contact the Procurement Officer or the person whose name appears on the face of solicitation NO LATER THAN SEVEN (7) WORKING DAYS BEFORE opening/closing date. Any revisions to the solicitation will be made only by addendum issued by the Procurement Officer.

6.3. Preparation & Submission

In order to be considered for selection, the bidder/offeror must submit a complete response to the Invitation for Bid/Request For Proposals. The bid/proposal shall be signed by an authorized representative of the bidders'/offerors' firm and delivered to the proper location by the time and date specified on the cover page.

6.4. Late Bids/Proposals

The OpenGov Procurement Software does not allow late bids or proposals. Bids/Proposals are not accepted at any Town location.

6.5. Quotations to be F.O.B. Destination

Quote F.O.B. DESTINATION for all competitive sealed bids. If otherwise, show exact cost to deliver.

6.6. Pricing Errors

In case of an error in price extension, the firm fixed unit price shall govern.

6.7. Bid/Proposal Acceptance Period

Bids shall be binding upon the bidder for sixty (60) days following the bid opening date. Proposals shall be binding upon the offeror for ninety (90) days following the proposal due date. Any bid/proposal on which the bidder/offeror shortens the acceptance period may be rejected.

6.8. Correction or Withdrawal of Bids and Cancellation of Awards Under Competitive Sealed Bidding

Correction or withdrawal of inadvertently erroneous bids before or after award, or cancellation of awards or contracts based on such bid mistakes, shall be permitted. After bid opening, no changes in bid prices or other provisions of bids prejudicial to the interest of the Town or fair competition shall be permitted. Except as otherwise provided by regulation, all decisions to permit the correction or withdrawal of bids, or to cancel awards or contracts based on bid mistakes, shall be supported by a written determination made by the Procurement Officer. No bid may be withdrawn when the result would be to award the contract on another bid of the same bidder or of another bidder in which the ownership of the withdrawing bidder is more than five percent (5%). If a bid is withdrawn, the lowest remaining bid shall be deemed to be the low bid. If the Procurement Officer, the Using Department, or a designee of such, denies the withdrawal of a bid, they shall notify the bidder in writing stating their decision.

6.9. Taxes

The Town of Vienna is exempt from the payment of federal excise or state sales taxes on all tangible, personal property for its use or consumption except taxes paid on materials that will be installed by the bidder and become a part of real property.

If a bidder is bidding on materials that require installation by the bidder and become a part of real property, the applicable taxes shall be included in the lump sum bid price for the installation of the material and not as a separate charge for taxes. The taxes shall be an obligation of the successful bidder and not of the Town, and the Town shall be held harmless for same by the successful bidder.

The Purchasing Office will furnish a Tax Exemption Certificate (Form ST-12) upon request and if applicable to this contract.

When a bidder lists a separate tax charge on the Bid Form and the tax is not applicable to the purchase by the Town, the bidder will be allowed to delete the tax from its bid.

6.10. Use of Brand Name or Equal

a) Unless otherwise provided in the solicitation, the name of a certain brand, make or manufacturer does not restrict bidders/offerors to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article which the Town of Vienna, in its sole discretion, determines to be equal to that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted.

b) The bidder/offeror is responsible to clearly and specifically indicate the product being offered and to provide sufficient descriptive literature, catalogs and technical details to enable the Town of Vienna to determine if the product offered meets the requirements of the solicitation. This is required even if

offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding only the information furnished with the bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a bid non-responsive. Unless the bidder/offeror clearly indicates in its bid/proposal that the product offered is an "EQUAL" product, such bid/proposal will be considered to offer the brand name product referenced in the solicitation.

c) It shall be understood that the burden of proof for an “equal” product shall be and remain the sole responsibility of the bidder. The Town’s decision of approval or disapproval of a proposed alternate shall be final. Nothing herein is intended to exclude any responsible bidder, its product or service or in any way restrain or restrict competition.

6.11. Samples

Samples, if required, must be furnished free of expense to the Town of Vienna on or before date specified; if not destroyed in examination, they will be returned to bidder, if requested, at his expense. Each sample must be marked with the bidder's name and address, Town's request number and opening date. DO NOT ENCLOSE IN OR ATTACH BID TO SAMPLE.

6.12. Trade Secrets/Proprietary Information

Trade secrets or proprietary information submitted by an Offeror in response to this Request for Proposal shall not be subject to public disclosure under the Virginia Freedom of Information Act (FOIA); however, the Offeror must invoke the protection of this section prior to or upon submission of data or materials to be protected and state the reasons why protection is necessary (Section 2.2-4342F of the Code of Virginia).

6.13. Delivery

Bids must show number of days required to place material in using agency's receiving area under normal conditions. Proposal must show the number of days required to provide the services/reports as specified.

Failure to state delivery time obligates bidder/offeror to complete delivery in fourteen (14) calendar days or as specified. A five (5) day difference in delivery promise may break a tie bid. An unrealistically short or long delivery promise may cause a bid/offer to be disregarded. Consistent failure to meet delivery promise without valid reason may cause removal from bid list. Delivery shall be made during normal working hours, 8:00 am to 4:30 pm Monday through Friday, unless prior approval for another time period has been obtained from Consignee.

6.14. Default

In case of failure to deliver goods/services in accordance with the contractual terms and conditions, the Town of Vienna, Virginia, after due oral or written notice, may procure them from other sources and hold the defaulting Contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Town of Vienna may have.

6.15. Town's Right to Terminate the Contract

The Contract may be terminated by the Town for any one of the following reasons:

a) If the successful bidder should be adjudged bankrupt, or make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of the successful bidder's insolvency, or if the successful bidder should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to deliver the goods or services within the time specified, or if the bidder otherwise defaults, then the Town may without prejudice to any other right or remedy, and after giving the successful bidder seven (7) calendar days written notice, terminate the employment of the successful bidder and procure such goods or services from other sources. In such event, the successful bidder shall be liable to the Town for any additional cost occasioned by such failure or other default.

b) In such cases, the successful bidder shall not be entitled to receive any further payment if the expense of finishing the contract requirements, including compensation for additional; managerial and administrative services shall exceed the unpaid balance of the contract price, the successful bidder shall pay the difference to the Town.

c) If the successful bidder should fail to make prompt payment to Subcontractor(s) for material or labor, persistently disregards laws, ordinances or the instruction of the Town, or otherwise be in substantial violation of any provisions of the Contract;

d) Failure of the Contractor to promptly make good any defects in materials or work or any defects of any other nature, the correction of which has been directed in writing by the Town;

e) Substantial evidence of collusion for the purpose of illegally procuring a contract or perpetrating fraud on the Town in the construction of work under contract.

f) Prior to termination of the Contract, the successful bidder and their Surety shall be notified in writing by the Town of the condition which makes termination of contract imminent. Ten (10) days after this notice is given, if a satisfactory effort has not been made by the successful bidder or their Surety to correct the conditions, the Town may declare the Contract terminated and notify the successful bidder and their Surety accordingly.

g) Upon receipt of notice of contract termination, the successful bidder shall immediately discontinue all operations. The Town may then proceed with the work in any lawful manner that they may elect until the project is final and complete.

h) The Town reserves the right to take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method is deemed expedient. In such case, the successful bidder shall not be entitled to receive any further payment. If the expense of finishing the work, including compensation for additional managerial and administrative services, shall exceed the unpaid balance of the contract price, the successful bidder shall pay the difference to the Town. The expense incurred by the Town as herein provided, and the damaged incurred through the Contractor's default, shall be certified by the Town.

i) Termination of the contract under this section is without prejudice to any rights or remedies of the Town.

j) The Town reserves the right to cancel and terminate any resulting contract, in whole or in part, without penalty, upon 60 days written notice to the Contractor/ Consultant. Any contract cancellation

notice shall not relieve the Contractor/Consultant of the obligation to delivery and/or perform on all outstanding services performed prior to the effective date of cancellation.

k) Notwithstanding anything to the contrary contained in the contract between the Town and the successful bidder, the Town may, without prejudice to any other rights it may have, terminate the contract for convenience and with cause, by giving thirty (30) days written notice to the successful bidder.

1) In the event the Contract is terminated for cause related to the Contractor/Consultant's (or its Subcontractor's) hiring of unauthorized aliens, Contractor/Consultant, Contractor/Consultant hereby waives any claim to lost profits and the Town will proceed in accordance with subsections f) et seq. above.

6.16. Condition of Items

All items bid/proposed shall be new and in first class condition, including containers suitable for shipments and storage, unless otherwise indicated in bid invitation/proposal request. Verbal agreements to the contrary will not be recognized.

6.17. Substitutions

No substitutions or cancellations permitted without prior written approval by the Procurement Officer.

6.18. Rights of the Town of Vienna

The Town reserves the right to accept or reject all or any part of bids/proposals, waive minor technicalities/informalities and award the contract to the lowest responsive and responsible bidder or most qualified and best suited offeror to best serve the interest of the Town.

6.19. Negotiation with the Lowest Bidder

a) If all bids received exceed the available funds for the proposed purchase, the Town, pursuant to Town Code provisions, may meet with the lowest responsive and responsible bidder to discuss a reduction in the scope for the proposed purchase and negotiate a contract price within the available funds.

b) After bid negotiations, the lowest responsible bidder shall submit an addendum to its bid, which addendum shall include the change in scope for the proposed purchase, the reduction in price and the new contract value.

c) If the proposed addendum is acceptable to the Town, the Town may award a contract within funds available to the lowest responsible bidder based upon the bid as amended by the addendum.

d) If the Town and the lowest responsible bidder cannot negotiate a contract within available funds, all bids shall be rejected.

6.20. Contractor's Performance

a) Goods and services must be delivered and rendered strictly in accordance with this bid and shall not deviate in any way from the terms, conditions, prices, quality, quantity, delivery instructions, and specifications of this bid.

b) All goods and/or services delivered and/or rendered shall comply with all applicable federal, state, and local laws, and shall not infringe any valid patent or trademark. The successful bidder shall indemnify, keep, save, and hold the Town, its officers and employees, harmless from any liability for infringement and from any and all claims or allegations of infringement by the bidder or the Town, its officers and employees, arising from, growing out of, or in any way involved with the goods delivered or services rendered pursuant to this purchase.

c) In the event that suit is brought against the Town, its officers and/or its employees, either independently or jointly with the bidder, the bidder shall defend the Town, its officers and employees, in any such suit at no cost to them. In the event that final judgment is obtained against the Town, its officers, and/or its employees, either independently or jointly with the bidder, then the bidder shall pay such judgment, including costs and attorney's fees, if any, and hold the Town, its officers and employees, harmless there from.

d) The successful bidder shall ensure that its employees shall observe and exercise all necessary caution and discretion so as to avoid injury to person or damage to property of any and all kinds.

e) The successful bidder shall not, in its product literature or advertising, refer to this purchase or the use of the bidder's goods or services by the Town of Vienna, Virginia.

f) The successful bidder shall cooperate with Town officials in performing the specified work so that interference with the Town's activities will be held to a minimum.

6.21. Drug-Free Workplace to be Maintained by the Contractor

(Code of Virginia Section 2.2-4312): During the performance of this contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibitions, (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "*drug-free workplace*" means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with the Virginia Public Procurement Act, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession, or use of any controlled substance or marijuana during the performance of the contract.

6.22. No Discrimination Against Faith-Based Organizations

The Town of Vienna does not discriminate against faith-based organizations as that term is defined in Virginia Code Section 2.2-4343.1.

6.23. Anti-Trust

By entering into a contract, the bidder/offeror conveys, sells, assigns, and transfers to the Town of Vienna all rights, title and interest in and to all causes of the action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Town of Vienna under said contract. Consistent and continued tie bidding could cause rejection of bids by the Procurement Officer and/or investigation for Anti-Trust violations.

6.24. Indemnification

The Contractor agrees to indemnify, defend and hold harmless the Town of Vienna, Virginia, its officers, agents, and employees from any claim, damages and actions of any kind or nature, whether at law or in equity, arising from or caused by the use of any materials, goods, or equipment of any kind or nature furnished by the contractor or any services of any kind or nature furnished by the contractor, provided that such liability is not attributable to the sole negligence of the using department or to failure of the using department to use the materials, goods or equipment in the manner already and permanently described by the contractor on the materials, goods or equipment delivered. The vendor agrees to protect the Town from claims involving infringement of patent or copyrights.

6.25. Tie Bids

If there is a tie for low bid and all other considerations are equal, and if the public interest will not permit the delay of re-advertising for bids, the award shall be determined by drawing lots in public.

6.26. Prohibition as Subcontractors under Competitive Sealed Bidding

No bidder who is permitted to withdraw a bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted.

6.27. Assignment of Contract

A contract shall not be assignable by the Contractor, in whole or in part, without the prior written consent of the Town of Vienna, Virginia.

6.28. Contract Documents

The contract entered into by the parties shall consist of the Invitation for Bid/Request For Proposal, the signed bid/proposal submitted by the Contractor, the Town of Vienna's standard Purchase Order, the Mandatory/Special Specifications, Terms and Conditions, and the General Terms and Conditions, all of which shall be referred to collectively as the Contract Documents.

If the contractor has a standard contract form, this form shall be submitted with the bid/proposal submittal for the Town's review of its terms and conditions.

6.29. License Requirement

All firms doing business in the Town of Vienna are required to be organized or authorized to transact business in the Commonwealth of Virginia or include in its bid or proposal a statement describing why the bidder or offeror is not required to be so authorized. Additionally all firms doing business in the Town of Vienna are required to be licensed in accordance with the Town's "Business, Professional and Occupational Licensing (BPOL) Tax" Ordinance. Wholesale and retail merchants without a business location in the Town are exempt from this requirement. Questions concerning the BPOL Tax should be directed to the Finance Department, Business License Office, Telephone number (703) 255 6321. The BPOL License number must be indicated on the submitted bid form.

6.30. Award

The contract shall be awarded to the lowest responsive and responsible bidder or the most qualified and best suited offeror.

The Town Council will award all contracts in the amount of seventy-five thousand dollars ($75,000.00) or more.

The Procurement Officer will award all contracts less than seventy-five thousand dollars ($75,000.00).

The Procurement Officer shall sign all contract documents, with the exception of "Construction" contracts, and issue a purchase order to the successful bidder/offeror.

6.31. Compensation

a) It is the Town’s policy not to pay for any goods or services until the same have been actually received.

b) Individual contractors shall provide the Purchasing Office their social security numbers and proprietorships, partnerships and corporations shall provide the federal employer identification numbers (Code of Virginia, Section 2.2-4354.2). This information shall be provided in the space indicated on the Bid Form.

c) The successful bidder shall submit a complete itemized invoice on each item or service, which is delivered under the contract. The successful bidder shall indicate the purchase order number on the front of each invoice and on the outside of each package or shipping container.

d) Cash discounts shall be deducted in accordance with the terms of the bid.

e) Payment shall be rendered to the successful bidder for satisfactory compliance with the general terms, conditions and specifications of this bid. The required payment date shall be either:

(i) the date on which payment is due under the terms of the contract for the provision of such goods or services; or

(ii) if such date is not established by contract, not more than forty-five (45) days after goods or services are received or not more than forty-five (45) days after the invoice is rendered, whichever is later (Code of Virginia, Section 2.2-4352).

f) Unless otherwise provided under the terms of the contract for the provisions of goods and services, if the Town fails to pay by the payment date, the Town agrees to pay the financial charge assessed by the successful bidder, which does not exceed one percent per month (Code of Virginia, Section 2.2-4354.4).

6.32. Method of Payment

Upon satisfactory delivery of the merchandise and/or satisfactory completion of the services, all invoices and statements shall reference the purchase order number and be submitted to:

Town of Vienna

ATTN: ACCOUNTS PAYABLE

127 Center St., S.

Vienna, VA 22180

or email to: ap@viennava.gov

The prices and payments shall be full compensation for the labor, tools, equipment, transportation and all other incidentals necessary to complete the specified terms and conditions.

6.33. Successful Bidder's Obligation to Pay Subcontractor

a) The successful bidder awarded the contract for this project shall take one of the two following actions within seven (7) days after the receipt of amounts paid to the successful bidder by the Town for work performed by the successful bidder's subcontractor(s) under the contract (Code of Virginia, Section 2.2-4354):

1. Pay the subcontractor(s) for the proportionate share of the total payment received from the Town attributable to the work performed by the subcontractor(s) under the contract; or

2. Notify the Town and subcontractor(s), in writing, of their intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

b) The successful bidder shall pay interest to the subcontractor(s) on all amounts owed by the successful bidder that remain unpaid after seven (7) days following receipt by the successful bidder of payment from the Town for work performed by the subcontractor(s) under the contract, except for amounts withheld as allowed in subparagraph a (2) of this section. Unless otherwise provided under the terms of this contract, interest shall accrue at the rate of one percent (1%) per month.

c) The successful bidder shall include in each of its subcontractors a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor(s).

d) The successful bidder's obligation to pay an interest charge to a subcontractor(s) pursuant to the payment clause in this section may not be construed to be an obligation of the Town. A contract modification may not be made for the purpose of providing reimbursement for such interest charge and a cost reimbursement claim may not include any amount for reimbursement for such interest charge.

6.34. Anti-Discrimination

By submitting their bids/proposals all bidders/offerors certify to the Town of Vienna that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, where applicable, and Section 2.2-4311 of the Virginia Public Procurement Act which provides:

In every contract over $10,000.00 the provisions in A and B below apply:

a) During the performance of this contract, the contractor agrees as follows:

The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin except where religion, sex or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor, is an equal opportunity employer.

Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

b) The Contractor will include the provisions of the foregoing paragraphs in every subcontract or purchase order of over $10,000.00, so that the provisions will be binding upon each subcontractor or vendor.

6.35. Ethics in Public Contracting

The provisions contained in Sections 2.2-4367 through 2.2-4377 of the Virginia Public Procurement Act as set forth in the Code of Virginia (1950), as amended, shall be applicable to all contracts solicited or entered into by the Town of Vienna. A copy of these provisions may be obtained from the Procurement Officer upon written request.

By submitting their bids/proposals, all bidders/offerors certify that their bids/proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder/offeror, supplier, manufacturer or subcontractor in connection with their bid/proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised unless consideration of substantially equal or greater value was exchanged.

6.36. Criminal Sanctions

The provisions referenced in Item 27 supplement, but do not supersede, other provisions of law including, but not limited to, the State and Local Government Conflict of Interests Act (§§ 2.2-3100 et seq.), the Virginia Governmental Frauds Act (§§ 18.2 498.1 et seq.), and Articles 2 (§§ 18.2 438 et seq.) and 3 (§§ 18.2 446 et seq.) of Chapter 10 of Title 18.2. The provisions apply notwithstanding the fact that the conduct described may not constitute a violation of the State and Local Government Conflict of Interests Act.

6.37. Applicable Law and Courts

Any contract resulting from this solicitation shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The Contractor shall comply with applicable federal, state and local laws and regulations.

6.38. Laws and Regulations

The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the work.

The Contractors and Subcontractors shall comply with the Virginia Contractor's Registration Law, Title 54.1, Chapter 11, Code of Virginia (1950), as amended.

All non-resident Contractors and Subcontractors submitting bids on the work described herein shall register with the Department of Labor and Industry under the provisions of Subsection 40.1 30 of the Code of Virginia (1950), as amended.

This contract and all other contracts and subcontracts are subject to the provisions of Articles 3 and 5, Chapter 4, Title 40.1, Code of Virginia (1950), as amended, relating to labor unions and the "right to work", and all Contractors and Subcontractors, whether residents or non-residents of the Commonwealth, who perform work related to the project shall comply with all of said provisions.

The Contractor shall furnish the Owner copies of affidavits upon request giving original dates, renewal dates and expiration dates of all labor contracts related to any phase of the work to be performed on the job site under this contract.

The provisions of all rules and regulations governing safety as adopted by the Safety Codes Commission of the Commonwealth of Virginia, issued by the Department of Labor and Industry under Title 40.1 of the Code of Virginia (1950), as amended, shall apply to all work under this contract.

The Contractor/Consultant shall comply with all laws and regulations of the Commonwealth of Virginia and the United States with respect to the employment of unauthorized aliens. Contractor/Consultant shall not hire or subcontract any portion of the work under this Contract to any individual the Contractor knows or reasonably should know to be an unauthorized alien as defined by 8 U.S.C. §1324a(h)(3). A violation of this provision shall constitute a material breach of the Contract and the Town may, in its sole discretion, terminate the contract.

6.39. Labeling of Hazardous Substances

If the items or products requested by this solicitation are "Hazardous Substances" as defined by 3.1 250 of the Code of Virginia (1950), as amended, 42 U.S.C. § 11001 et seq., or 42 U.S.C. § 9601 et seq., then the bidder/offeror, by submitting his bid/proposal, certifies and warrants that the items or products to be delivered under this contract shall be properly labeled as required by the foregoing sections and that by delivering the items or products that the bidder/offer does not violate any of the prohibitions of Sec. 3.1 252 or the Code of Virginia or Title 15 U.S.C. Sec. 1263.

6.40. Material Safety Data Sheets

Material Safety Data Sheets (MSDS) and descriptive literature shall be provided with the bid/proposal or delivered materials for each chemical and/or compound offered. Failure of the bidder/offeror to submit such data sheets may be cause for declaring the bid/proposal as non responsive.

6.41. Debarment Status

By submitting their bids, Bidders certify that they are not currently debarred by the Commonwealth of Virginia or any Political Subdivision from submitting bids on contracts for the type of services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

6.42. Record Retention/Town Audits

a) The successful bidder shall retain, during the performance of the contract and for a period of three (3) years from the completion of the contract, all records pertaining to the successful bidder's bid and any contract awarded pursuant to this Invitation for Bid. Such records shall include but not be limited to all paid vouchers including those for out-of-pocket expenses; other reimbursement supported by invoices, including successful bidder's copies of periodic estimates for partial payments; ledgers; cancelled checks; deposit slips; bank statements; journals; contract amendments and change orders; insurance documents; payroll documents; timesheets; memoranda; and correspondence. Such records shall be available to the Town on demand and without advance notice during the successful bidder's normal working hours.

b) Town personnel may perform in-progress and post-audits of the successful bidder's records as a result of a contract awarded pursuant to this Invitation for Bid. Files would be available on demand and without notice during normal working hours.

6.43. Modification of Contract

The Town may, upon mutual agreement with the Contractor, issue written modifications to the scope of work of this contract, and within the general scope thereof, except that no modifications can be made which will result in an increase of the original contract price by a cumulative amount of more than $50,000.00 or twenty-five percent (25%) of the amount of the original contract, whichever is greater, without the advance written approval of the Mayor and the Town Council. (Section 2.2-4309 of Virginia Public Procurement Act).

Should it become necessary, for the best interest of the Town, to make modifications, the same shall be covered by change order. The Contractor shall not begin work on any alteration requiring a change order until the agreement, setting forth the changes/modifications, has been executed in writing by the Town and the Contractor.

If a satisfactory agreement cannot be mutually agreed to for any item requiring a change order, the Town reserves the right to terminate the contract as it applies to the items in question and make such arrangements as may be deemed necessary to complete the work.

The Town may, in writing, omit from the work any item, other than major items, found unnecessary to the project and such omission shall not be a waiver of any condition of the contract nor invalidate any of the provisions thereof. Major items may be omitted by change order.

The Contractor shall be paid for all work done toward the completion of the item prior to such cancellation, alteration or suspension of the work by the Town.

A major item shall be construed to be any item, the total cost of which is equal to or greater than ten percent (10%) of the total; contract amount for each separate alternate, computed on the basis of the proposed quantity and the contract unit price.

6.44. Specification Familiarity

a) It is the Bidder's responsibility to examine this entire IFB carefully. If a question arises as to the meaning or intent of these documents, inquiry must be made in writing to the Procurement Officer.

b) The submission of a bid shall indicate that the Bidder thoroughly understands the terms and conditions of the IFB.

6.45. Contract Forms

a) Bidders are advised that the Town does not sign standard contract forms that may be used by the bidder. The selected Bidder will be expected to enter into a contract with the Town for the commodities outlined in this IFB. The form of contract will be the Town's Purchase Order and/or Agreement.

b) The bid form contains a signature line for the bidder that must be signed when submitting a bid. The signature certifies the bidder is an agent of officer authorized to bind the Contractor to the terms and conditions of the IFB.

6.46. Addenda and Interpretations

No interpretation of the meaning of these documents will be made to any bidder orally. Any request for an interpretation must be in writing addressed to Town of Vienna, 127 Center Street, South, Vienna, VA 22180, Attention: Procurement Officer or emailed to jerry.amacker@viennava.gov. To be given consideration, requests must be received at least five days prior to the date fixed for the submission of Bids. Any and all such interpretations and any supplemental instructions will be posted via an addendum. Failure of any bidder to receive any such addenda or interpretations shall not relieve said bidder from any obligation under their Bid as submitted. All addenda so issued shall become part of the Contract Documents.

6.47. Insurance

The Contractor shall provide the Procurement Officer with a Certificate of Insurance PRIOR to the start of any work under the contract and agrees to maintain such insurance until the completion of the contract. The minimum limits of liability shall be:

Workers' Compensation -- Standard Virginia Workers' Compensation Policy

Broad Form Comprehensive General Liability--$2,000,000.00.

Combined Single Limit coverage to include:

- Premises - Operations;
- Products/Completed Operations;

- Contractual; Independent Contractors;
- Owners and Contractors
- Protective; Personal Injury (Libel, Slander, Defamation of Character, etc.)

Automobile Liability--$1,000,000.00 Combined Single Limit.

The Town of Vienna, Virginia is to be named as an additional insured and this is to be so noted on Certificate of Insurance.

The policy shall be delivered to the Town of Vienna PRIOR to the commencement of any work.

A thirty (30) day written notice of cancellation or non-renewal shall be furnished by certified mail to the purchasing office at the address indicated on the solicitation.

Contractor's signature on this solicitation constitutes certification that, if awarded the contract, Contractor shall obtain the required coverage as specified herein within ten (10) days of notification of award.

6.48. Worker's Compensation and Employer's Liability

a) The successful Bidder's/Offeror's insurance shall cover the bidder/offeror and its subcontractors of every tier of those sources of liability which would be covered by the latest edition of the standard Worker's Compensation Policy, as filed for use in the Commonwealth of Virginia by the National Council on Compensation Insurance, without restrictive endorsements, but including Broad Form All States Endorsement. In addition to coverage for the Virginia Worker's Compensation Act, where appropriate, coverage is to be included for the United States Longshore and Harbor Worker's Compensation Act, Maritime including Jones Act, Federal Liability Act and any other applicable federal or state law.

b) Subject to the restrictions of coverage found in the standard Worker's Compensation Policy, there shall be no maximum limit on the amount of coverage for liability imposed by the Virginia Worker's Compensation Act, the United States Longshore and Harbor Worker's Compensation Act, or any other coverage customarily insured under Part One of the standard Worker's Compensation Policy. The minimum amount of coverage for those coverages customarily insured under Part Two of the standards Worker's Compensation (inclusive of any amounts provided by an umbrella or excess policy) shall be $1,000,000 bodily injury by accident each accident, $1,000,000 bodily injury by disease each employee, and $1,000,000 bodily injury by disease policy limit or aggregate where such aggregate is applicable under the terms of the standard Worker's Compensation Policy.

6.49. Professional Liability

a) The successful bidder/offeror shall provide the Town of Vienna with an Errors and Omissions Liability Policy (E&O Policy). The policy shall cover the Town of Vienna for all sources of liability which would be covered by the latest edition of the standard Errors and Omissions Liability Coverage Form, as filed for use in the Commonwealth of Virginia by the Insurance Services Office without the attachment of restrictive endorsements.

b) The policy shall be endorsed to include the Town of Vienna's officials, officers, agents and employees as insured. The E&O Policy shall include the successful Offeror and the offeror's subcontractors of every tier as the designated in the declarations.

c) The minimum E&O Policy limits to be provided by the successful Offeror (inclusive of any amounts provided by an umbrella or excess policy) shall be $1,000,000 per occurrence combined single limit for bodily injury liability and property damage liability. The limits afforded by the E&O Policy (or umbrella or excess policy with respect to it) shall apply only to the Town of Vienna officials, officers, agents and employees and only to claims arising out of or in connection with the work under this contract.

The insurance provided by the successful Offeror pursuant to the resulting contract shall apply on a primary basis and any other insurance or self-insurance maintained by the Town of Vienna or the Town of Vienna official, officer, agent or employee shall be excess of and not contributing with the insurance provided by or on behalf of the Offeror.

The coverages other than Worker's Compensation may be either on an occurrence or a claims-made basis. Provided, however, that claims-made coverage for other than the Products/Completed Operations shall respond to claims arising out of accidents, occurrences, incidents and offenses happening after the commencement of the resulting contract but before the end of the contract completion date provided that the claim is made within five years after the contract completion date.

Prior to commencing work under a resulting contract, the successful Offeror shall furnish the Town of Vienna with a Certificate(s) of Insurance naming the Town of Vienna, its officers, employees and agents, as additional insureds, giving a forty-five (45) day notice of cancellation, non-renewal, or change in the insurance coverage, and/or restrictions.

6.50. Safety

All contractors and subcontractors performing services for the Town of Vienna are required to comply with OSHA standards and accepted safety rules and regulations.

6.51. Ownership of Products/Services

All control work, compilation of notes, work sheets, and any and all interim and final products and materials shall be the sole property of the Town of Vienna.

6.52. Collusion

By submitting a bid/proposal in response to this solicitation, the Bidder/Offeror represents that in the preparation and submission of this bid/proposal, said Bidder/Offeror did not, either directly or indirectly, enter into any combination or arrangement with any person, Bidder/Offeror or corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section 1) or Sections 59.1-9.1 through 59.1-9.17 or Sections 59.1-68.6 through 59.1-68.8 of the Code of Virginia.

7. Section F - Owner Contractor Agreement; Example

Owner-Contractor Agreement (Example)

CONTRACT NUMBER: IFB 24-26 (P.O. #)

THIS AGREEMENT, is made this_____day of 2024, by and between The Town of Vienna, Virginia (herein referred to as the "Owner"), whose mailing address is c/o Department of Public Works, 127 Center Street South, Vienna, Virginia 22180, and _____ (herein referred to as the "Contractor"), whose mailing address is as follows, _____ . All correspondence, submittals and notices relating to or required under this Contract shall be sent in writing to the above addresses; unless either party is notified in writing by the other, of a change in address.

WITNESSETH:

WHEREAS it is the intention of the Owner to obtain the services of the Contractor in connection with the construction activities of Sidewalk Projects , hereinafter referred to as the "Project" or the "Work"; and WHEREAS the Contractor desires to perform such construction in accordance with the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the promises made herein and other good and valuable considerations, the following terms and conditions are hereby mutually agreed to, by and between the Owner and Contractor:

Article 1

DEFINITIONS

1.1 All terms in this Agreement which are defined in the Information for Bidders and the General Conditions shall have the meanings designated therein.

1.2 The Contract Documents are as defined in the General Conditions. Such documents form the Contract, and all are as fully a part thereof as if attached to this Agreement or repeated herein.

Article 2

STATEMENT OF THE WORK

2.1 The Contractor shall provide and pay for all materials, tools, equipment, labor and professional and non- professional services, and shall perform all other acts and supply all other things necessary, to fully and properly perform and complete the Work, as required by the Contract Documents.

2.2 The Contractor shall further provide and pay for all related facilities described in any of the Contract Documents, including all work expressly specified therein and such additional work as may be reasonably inferred therefrom, saving and excepting only such items of work as are specifically stated in the Contract Documents not to be the obligation of the Contractor. The totality of the obligations imposed upon the Contractor by this Article and by all other provisions of the Contract Documents, as well as the structures to be built and the labor to be performed, is herein referred to as the "Work".

Article 3

ARCHITECT/ENGINEER

3.1 The Architect/Engineer (hereinafter referred to as the "A/E" and as defined in the General Conditions) shall be the Director of Public Works or his designee, whose address is 127 Center Street South, Vienna, Virginia 22180; provided, however, that the Owner may, without liability to the Contractor, unilaterally amend this Article from time to time by designating different persons or organizations to act as it's A/E and so advising the Contractor in writing, at which time the person(s) or organization(s) so designated shall be the A/E for purposes of this Contract.

Article 4

TIME OF COMMENCEMENT AND COMPLETION

4.1 The Contractor shall commence the Work promptly upon the date established in the Notice to Proceed for each task assigned under this contract. If there is no Notice to Proceed, the date of commencement of the Work shall be the date of this Agreement or such other date as may be established herein.

4.2 Time is of the essence. The Contractor shall complete each task assigned, as defined in the General Conditions within the limits established in the Notice to Proceed or the date otherwise established for the commencement of Work. This project completion date is October 31, 2024.

4.3 The liquidated damages incurred by the Owner due to the Contractor's failure to complete the Work within the Contract Time, including any extensions thereof, shall be $350.00 per day for each consecutive calendar day beyond the Contract Time (Sundays and all holidays included) for which the Contractor shall fail to complete the Work.

4.4 The liquidated damages incurred by the Owner due to the Contractor's failure to complete each activity of Work designated in Article 4.3, above within the applicable interim Milestone date, as applicable, shall be as hereinafter stated for each Milestone, for each consecutive day beyond the Milestone date (Sundays and all holidays included) for which the Contractor shall fail to complete the activity of Work.

4.5 The amount of liquidated damages set forth in Articles 4.4 and 4.5 hereinabove shall be assessed cumulatively. The items of cost included in the assessment of liquidated damages are as defined in the General Conditions. This provision for liquidated damages does not bar Owner's right to enforce other rights and remedies against Contractor, including but not limited to, specific performance or injunctive relief.

Article 5

CONTRACT SUM

5.1 Provided that the Contractor shall strictly and completely perform all of its obligations under the Contract Documents, and subject only to additions and deductions by Modification or as otherwise provided in the Contract Documents, the Owner shall pay to the Contractor, in current funds and at the times and in the installments hereinafter specified. The amount of each task assigned under this contract will be established prior to issuance of a Notice to Proceed for that task. The total amount of

the contract shall not exceed:_____ **Dollars($_____.00)**, herein referred to as the "Contract Sum".

Article 6

PROGRESS PAYMENTS

6.1 The Contractor hereby agrees that on or about the first day of the month for every month during the performance of the Work they will deliver to the A/E a Pay Request Application in accordance with the provisions of Article 9 of the General Conditions. This date may be changed upon mutual agreement, stated in writing, between the Owner and Contractor. Payment under this Contract shall be made as provided in the General Conditions.

Article 7

OTHER REQUIREMENTS

7.1 The Contractor shall submit the Performance Bond, Labor and Material Payment Bond and Certification of Insurance as required by the Contract Documents.

7.2 Additional sets of drawings or specifications may be obtained by the Contractor by paying the Owner for the costs of reproduction, handling and mailing.

7.3 The Contractor shall perform at least sixty-five percent (65%) of the total Work with forces that are in the direct employment of the Contractor's organization unless a written waiver is obtained by the Owner.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and date first above written.

TOWN OF VIENNA, VA (Owner)

Attest:

By: _____

Town Clerk, Melanie J. Clark

By: _____

Linda Colbert, Mayor

Witness:

By: _____

CONTRACTOR:

By: _____

Contractor (SEAL)

By: _____

_____

_____

State of _____

County of _____, to-wit:

The foregoing instrument was acknowledged before me on this _____ day of _____ 2024, by _____ (Name and title of agent or officer) on behalf of (Name of Corporation/Partnership)

_____

Notary Public

My Commission Expires: _____

8. Bid Tables

PART A: COURTHOUSE ROAD SW PROJECT

Line Item	Description	VDOT SPEC #	Quantity	Unit of Measure	Unit Cost	Total
1	MOBILIZATION	513	1	LS		
2	CONSTRUCTION SURVEYING	517	1	LS		
3	MOT (SEE PLANS AND IFB)		1	LS		
4	CLEARING & GRUBBING	301	0.5	ACRE		
5	EXCAVATION	303	115	CY		
6	NS SAW-CUT ASPH CONC	315	1,000	LF		
7	SAW CUT HYDRAULIC CEMENT CONCRETE ITEMS	502	135	LF		
8	REMOVE AND DISPOSE OF ASPHALT PAVEMENT- DEPTH OF ASPHALT 4" AND LESS	508	105	SY		
9	REMOVE AND DISPOSE OF ASPHALT PAVEMENT- DEPTH OF ASPHALT OVER 4"	508	518	SY		
10	REMOVE AND DISPOSE OF CONCRETE DRIVEWAY AND DRIVEWAY APRON	510	191	SY		
11	REMOVE AND DISPOSE OF CONCRETE CURB AND CURB AND GUTTER	510	838	SY		

Line Item	Description	VDOT SPEC #	Quantity	Unit of Measure	Unit Cost	Total
12	REMOVE AND DISPOSE OF CONCRETE SIDEWALK	510	164	SY		
13	REMOVE AND DISPOSE OF BRICK SIDEWALK	510	5	SY		
14	AGGR. BASE MATL. TY. I NO. 21A OR 21B	308	335	TON		
15	ASPHALT CONCRETE TY. SM-9.5D	315	167	TON		
16	ASPHALT CONCRETE TY. BM-25.0A OR IM-19	315	84	TON		
17	FLEXIBLE PAVEMENT PLANNING (0 to 2" DEPTH)	515	261	SY		
18	REINFORCED CONCRETE RETAINING WALL WITH BRICK FACING	PLAN	1	LS		
19	FLEXBOLLARD- 4.5 INCH DIAMETER x 32 INCH HIGH, FURNISH AND INSTALL	PLAN	4	EA		
20	CONCRETE CURB & GUTTER	ATTD, 502	803	LF		
21	CONCRETE HEADER CURB	ATTD, 502	258	LF		
22	9" THICK CONCRETE DRIVEWAY RAMP (ARL R-2.4C), AND 9" THICK CONCRETE DRIVEWAY	ATTD, 502	55	SY		
23	7" THICK CONCRETE DRIVEWAY APRON, VDOT CG-9B, OR CG-9D	316	107	SY		

Line Item	Description	VDOT SPEC #	Quantity	Unit of Measure	Unit Cost	Total
24	6" THICK RESIDENTIAL CONCRETE DRIVEWAY RAMP (ARL R-2.4C)	ATTD, 502	43	SY		
25	HYDR. CEMENT CONC. SIDEWALK 4"	504	580	SY		
26	CG-12 DETECTABLE WARNING SURFACE	504	5	SY		
27	NS BRICK BANDING ON SIDEWALK	PLAN	15	SY		
28	STORM DRAIN STRUCTURE #12 COMPLETE AND IN PLACE AS SHOWN ON PLAN (INCLUDES INLET TOP DI-3C, L = 6 ft)	PLAN	1	LS		
29	STORM DRAIN STRUCTURE #20 COMPLETE AND IN PLACE AS SHOWN ON PLAN (INCLUDES INLET TOP DI-3B, L = 12 ft)	PLAN	1	LS		
30	DI-3C, L = 6 ft	301	1	EA		
31	27" RCP CL III STORM DRAIN PIPE	302	50	LF		
32	CONNECT STORM DRAIN TO EXISTING STRUCTURE	302	2	EA		
33	REPLACE EXISTING DROP INLET TOP	510	2	EA		
34	REMOVE TREE AND GRIND STUMPS (6"" DBH TO 18"" DBH)	510	2	EA		

Line Item	Description	VDOT SPEC #	Quantity	Unit of Measure	Unit Cost	Total
35	RELOCATE EXIST. MAILBOX	510	6	EA		
36	ADJUST EXISTING WATER METER BOX	510	4	EA		
37	SOD, INCLUDES 2"" DEPTH OF CLASS ""A"" TOPSOIL	604, 602	36	SY		
38	INLET PROTECTION, TYPE B	303	5	EA		
39	TEMPORARY SILT FENCE, TYPE A	303	772	LF		
40	HIGH VISIBILITY FENCE, 4 FEET	507	230	LF		
41	RELOCATE/RESET EXISTING TRAFFIC SIGN	510	9	EA		
42	REMOVE EXISTING HANDRAIL AND FURNISH AND INSTALL NEW ARL STD ORNAMENTAL HANDRAIL, ARL STD R-3.2 (AT 131 COURTHOUSE RD)	ATTD	15	LF		
43	ROOT PRUNING PER TOWN OF VIENNA DETAIL L-1	ATTD	30	LF		
44	TYPE B CLASS I THERMOPLASTIC PAVEMENT MARKING-4 INCH YELLOW	246, 704	600	LF		

Line Item	Description	VDOT SPEC #	Quantity	Unit of Measure	Unit Cost	Total
45	TYPE B CLASS I THERMOPLASTIC PAVEMENT MARKING-24 INCH WHITE "STOP BAR"	246, 704	12	LF		
TOTAL						

PART B: PLEASANT STREET NW PROJECT

Line Item	Description	VDOT SPEC #	Quantity	Unit of Measure	Unit Cost	Total
1	MOBILIZATION	513	1	LS		
2	CONSTRUCTION SURVEYING	517	1	LS		
3	MOT (SEE PLANS AND IFB)		1	LS		
4	CLEARING & GRUBBING	301	0.09	ACRE		
5	EXCAVATION	303	48	CY		
6	NS SAW-CUT ASPH CONC	315	160	LF		
7	SAW CUT HYDRAULIC CEMENT CONCRETE ITEMS	502	25	LF		
8	REMOVE AND DISPOSE OF ASPHALT PAVEMENT- DEPTH OF ASPHALT OVER 4"	508	92	SY		
9	REMOVE AND DISPOSE OF CONCRETE DRIVEWAY AND DRIVEWAY APRON	510	13	SY		

Line Item	Description	VDOT SPEC #	Quantity	Unit of Measure	Unit Cost	Total
10	REMOVE AND DISPOSE OF CONCRETE CURB AND CURB AND GUTTER	510	139	SY		
11	REMOVE AND DISPOSE OF CONCRETE SIDEWALK	510	24	SY		
12	AGGR. BASE MATL. TY. I NO. 21A OR 21B	308	57	TON		
13	ASPHALT CONCRETE TY. SM-9.5D	315	24	TON		
14	ASPHALT CONCRETE TY. BM-25.0A OR IM-19	315	22	TON		
15	FLEXIBLE PAVEMENT PLANNING (0 to 2" DEPTH)	515	126	SY		
16	REINFORCED CONCRETE RETAINING WALL WITH BRICK FACING	PLAN	1	LS		
17	ORNAMENTAL HANDRAIL, ARL STD R-3.2 (BLACK)	ATTD	57	LF		
18	CONCRETE CURB & GUTTER	ATTD, 502	127	LF		
19	CONCRETE HEADER CURB	ATTD, 502	10	LF		
20	9" THICK CONCRETE DRIVEWAY RAMP (ARL R-2.4C), AND 9" THICK CONCRETE DRIVEWAY	ATTD, 502	21.5	SY		

Line Item	Description	VDOT SPEC #	Quantity	Unit of Measure	Unit Cost	Total
21	6" THICK RESIDENTIAL CONCRETE DRIVEWAY RAMP (ARL R-2.4C)	ATTD, 502	43	SY		
22	HYDR. CEMENT CONC. SIDEWALK 4""	504	89	SY		
23	CG-12 DETECTABLE WARNING SURFACE	504	1	SY		
24	REMOVE TREE AND GRIND STUMPS (6"" DBH TO 18"" DBH)	510	2	EA		
25	ADJUST EXISTING WATER METER BOX	510	1	EA		
26	HARDWOOD MULCH	605	3	CY		
27	INLET PROTECTION, TYPE B	303	1	EA		
28	TEMPORARY SILT FENCE, TYPE A	303	106	LF		
29	HIGH VISIBILITY FENCE, 4 FEET	507	100	LF		
30	RELOCATE/RESET EXISTING TRAFFIC SIGN	510	3	EA		
TOTAL						

9. Vendor Questionnaire

9.1. Bidder Info*

Enter name and legal address of firm submitting bid.

*Response required

9.2. Primary Contact*

Please provide the following information for the main contact for all communications regarding this bid.

Name

Title

Phone Number

Email Address

*Response required

9.3. Secondary Contact

Please provide the following information for the secondary contact for all communication regarding this solicitation:

Name

Title

Phone Number

Email Address

9.4. Certification Regarding Debarment*

This is to certify that this person/firm/corporation is not now debarred by the Federal Government or by the Commonwealth of Virginia or by any other state, town, city, or county from submitting proposals for such work nor are they an agent of any person or entity that is now debarred.

☐ Please confirm

*Response required

9.5. References*

Please supply a minimum of three (3) projects similar in character and Scope of Work specified under this solicitation? Please include the location and type of work, owner's name and address, contact person (name, email address, and telephone) and completion date?

*Response required

9.6. State Corporate Commission*

Please download the below documents, complete, and upload.

- SCC.docx

*Response required

9.7. Contractor's License*

As required under Title 54, Code of Virginia (1950) a Contract for construction, removal, repair or improvement of a building or other real property that exceeds one thousand ($1,000.00) shall furnish the following:

☐ Licensed Class A
☐ Licensed Class B
☐ Licensed Class C
*Response required

9.8. Contractor's License Number

Please enter your Contractor's License Number here.

9.9. SWaM Status*

A certified SWaM Business is one that holds a current certification from the Virginia Department of Small Business and Supplier Diversity (SBSD), the U.S. Small Business Association (SBA), the Women's Business Enterprise National Council (WBENC), National Minority Supplier Development Council (NMSDC) or from other U.S. State and some local government supplier diversity program.

Is your company a certified Small, Woman or Minority Owned (SWaM) Business or Disadvantaged Business Enterprise?

☐ Yes
☐ No

*Response required

9.10. Certification Type

What is your company's certification type?

Select all that apply

☐ Small Business
☐ Woman-Owned Business
☐ Minority-Owned Business
☐ Service-Disabled Veteran (SDV)
☐ Disadvantaged Business Enterprise (DBE)

9.11. Certification Information

Is applicable, please provide the Certification Entity/Agency and the Certification Number(s).

9.12. Other Documents

Please upload other documents here.

9.13. Authorization*

In accordance with the terms, conditions and specifications of this Invitation for Bid, the authorized person(s) agrees to furnish the items and/or services requested. The authorized person(s) acknowledges that their bid is valid for a period of 90 days from the due date and certifies they have read, understand, and agrees to all terms and conditions and requirements of this Invitation for Bid, and is authorized to contract on behalf of the firm submitting the response.

In the space below, enter the name and contact email of the person who has signature authority for the Offeror's company, and is hereby agreeing to the statement above.

*Response required