City of Virginia Beach

Public Works
Project Manual
for the Construction of

CIP #_____

Bid Number _____
Date: _____

Prepared by:

Division I
Description of Changes

Section #	Date	Description of Change
Section 101	December 15, 2008 January 9, 2018	Definition of Superintendent changed Changed Specifications from VDOT 2007 R&B to VDOT 2016 R&B
Section 102	July 19, 2000	Posting of Intent to Award Notices (102.02-M) Removed separate mailing address for purchasing.
	May 5, 2001	Changed phone number for physically and visually disabled.
	October 17, 2001	All references to the Code of Virginia, Chapter 11, were changed due to change in Code.
	February 21, 2002	Faith-Based Non-discrimination language
	July 9, 2002	Changed location to receive bids.
	July 27, 2003	Notary Statement Revised Hold Harmless Statement
	March 18, 2004	Proprietary Information Statement
	August 11, 2004	Liquidated Damages Statement
	January 5, 2005	Contracting Agent changed to Bill S. Davis, Purchasing Agent
	June 14, 2006	102.02 - Instructions to Bidders – L. Good-Faith Minority and Woman-Owned Business Participation Efforts
	June 14, 2006	Contracting Agent changed to Mitchell D. Frasier, Contracting Agent (102.01)
	June 13, 2007	Section 102.03 - Bid Proposal/Contract – Modifications to the signature pages to incorporate new Notary Laws.
	July 9, 2007	Relocate Section 105.16 to Section 102.03 paragraph 12
	July 9, 2007	Relocate Section 107.01, part 2 to Section 102.03 paragraph 13
	May 20, 2008	Section 102.03 - G. Applicable Law/Compliance with all Laws/Venue: Added 2. Compliance with all laws, b. New immigration language for contracts as of July 1, 2008
	June 17, 2008	The hearing impaired number has changed from 385-4305 to 711.
	August 1, 2008	Amendments to the 2007 VDOT "Road and Bridge Specifications" manual is now applicable.
	December 15, 2008	Updated all referenced manuals
	February 12, 2010	Updated Section 102.02 – Instruction to Bidder, Paragraph "L", to include the Service Disabled Veteran language.
	February 12, 2010	Deleted: Section 102.05 – Subcontractor's Data Sheet
	May 25, 2011	New "Good Faith" Participation Effort language added to Section 102.01 & Section 102.02
	June 12, 2014	Section 102.02 – Instructions to Bidder, Paragraph L – SWaM Certified-Small Business Participation Plan Requirements language modified.
	April 7, 2015	Section 102.01 – Advertisement for Bid – Purchasing Division address changed
	September 28, 2015	Purchasing Agent changed to Taylor V. Adams, CPPO
	February 16, 2016	Section 102.02- Instructions to Bidders, H. Proposals – Language was revised.
	January 9, 2018	Changed Specifications from VDOT 2007 R&B to VDOT 2016 R&B
	September 19, 2018	Removed Taylor V. Adams as the Purchasing Agent

Section 102-continued	April 11, 2019	Section 102 – 10% Minority Contracting Aspirational Goal was increased to 12% throughout section 102
Section 103	April 10, 2009 February 12, 2010 February 12, 2010 February 12, 2010 February 12, 2010 February 12, 2010 August 10, 2012 August 10, 2012 August 10, 2012 November 14, 2012 July 2, 2014 February 19, 2015 May 27, 2015 January 12, 2016	Section 103.01 - Instructions to Successful Bidder, Paragraph F- Insurance. Modification to insurance requirement. 103.01 - Instructions to Successful Bidder, Paragraph "F": Workers compensation is changed from "statutory" to 1 million/Occurrence 103.01 - Instructions to Successful Bidder, Paragraph "D": Modification to the Bonds language. 103.03- Questionnaire changed from Section 103.02 to Section 103.03 Inserted 103.02 - Contractor Performance Evaluation (CPE) Section 103.05 - Certificate of Insurance page, Minor wording changes Section 103.01 – Page 1 of 10, Paragraph "E" – Completed Operation Insurance coverage changed from 1 yr to 5 yrs. Section 103.01 – Page 2 of 10, Commercial General Liability – Completed Operations coverage changed from 10 yrs to 5 yrs. Section 103.01 – Page 2 of 10, Builder's Risk requirement description is added to the contract. Section 103.06: Certificate of Insurance DF-70 replaced with ACORD Section 103.01 – Instruction to Successful Bidder, Added Paragraph J - Audit requirements Section 103.04 - Contract Performance Bond Revised Section 103.05 – Contract Payment Bond Revised Section 103.01- Paragraph F. Insurance – Builder Risk Insurance Language was revised. Section 103.01 – Paragraph K –Offset/Setoff Language added
Section 105	January 9, 2004 July 9, 2007	105.02 - Changed Certifications and Shop Drawings 105.04 - Added Sanitary Sewer Structures 105.10 - Pump station clarification. 105.12 - Changed Section number from 103.06 (e) to 108.08. Relocate Section 105.16 to Section 102.03 paragraph 12
Section 107	July 9, 2007 February 25, 2011	107.01 - Laws to be Observed 107.02 - Permits, Certificates, and Licenses Obtained
Section 108	April 3, 2001 October 17, 2001 October 17, 2013	108.08 - Added 30 day time frame. 108.12 - Liquidated Damages changed to mirror VDOT 108.01 – Prime Contractor participation changed from 50% to 30%
Section 109	July 6, 2000	None

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See City of Virginia Beach Standard Amendments to the 2016 VDOT Road and Bridge Specifications Available for download online: https://www.vbgov.com/government/departments/public-utilities/Engineering-Construction/Standards-Forms/Pages/Construction-Specifications.aspx

All Reference to The Virginia Department of Transportation 2007 "Road and Bridge Standards" are deleted in their entirety from the above file. Use the 2016 version of the Virginia Department of Transportation "Road and Bridge Standards" to cover Division VIII

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SECTION 101 - DEFINITIONS OF ABBREVIATIONS, ACRONYMS, AND TERMS

SECTION 101.01 - ABBREVIATIONS AND ACRONYMS

In the project manual and in other contract documents, the following abbreviations and acronyms shall be interpreted as follows:

AAN	American Association of Nurserymen, Inc.
AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
ABS	Acrylonitrilebutadienestyrene (an elastomer)
AC	Alternating current
ACI	American Concrete Institute
ADT	Annual average daily traffic
AED	Associated Equipment Distributors
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
APA	American Plywood Association
API	American Petroleum Institute; American Pipe Institute
AREA	American Railway Engineering Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM.	American Society for Testing and Materials
AWG	American wire gage
AWPA	American Wood Preservers Association
AWS	American Welding Society
AWWA	American Water Works Association
CBR	California bearing ratio
CRSI	Concrete Reinforcing Steel Institute
DBE	Disadvantaged Business Enterprise
DC	Direct current
DHV	Design Hourly Volume
EEI	Edison Electric Institute
EEO	Equal employment opportunity
EIA	Electronic Industries Association
EPA	Environmental Protection Agency
EPDM	Ethylenepropylenedienemonomer (an elastomer)
F/A	Filler/asphalt ratio
FHWA	Federal Highway Administration
FS	Federal Specifications, General Services Administration
ICEA	Insulated Cable Engineers Association
IMSA	International Municipal Signal Association
ITE	Institute of Transportation Engineers

LCD	Liquid crystal display
LPG	Liquid petroleum gas
MBE	Minority Business Enterprise
MEKP	Methyl ethyl ketone peroxide
MIL	Military specifications
MSDS	Materials Safety Data Sheet
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways and the Virginia supplement to same
NBS	National Bureau of Standards
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NIST	National Institute of Standards and Technology
NRC	Nuclear Regulatory Commission
PCI	Prestressed Concrete Institute
PE	Polyethylene
PSC	Product Selection Committee
PTL	Plywood Testing Laboratory
PVC	Polyvinylchloride
PVF	Polyvinylfluoride
REA	Rural Electrification Administration
SAE	Society of Automotive Engineers
SPIB	Southern Pine Inspection Bureau
SSPC	Steel Structures Painting Council
TAPPI	Technical Association of Pulp and Paper Industry
TFE	Polytetrafluoroethylene
UL	Underwriters' Laboratories, Inc.
VAC	Volts alternating current
VDC	Volts direct current
VDOT	Virginia Department of Transportation
VEP	Value engineering proposal
VFA	Voids filled with asphalt
VMA	Voids in mineral aggregate
VTM	Virginia Test Methods; voids in total mix
WBE	Women Business Enterprise

SECTION 101.02 - TERMS

In the project manual and in other contract documents, the following terms and pronouns used in place of them shall be interpreted as follows:

Addendum. The modification of the bid documents issued in writing by the Owner prior to the opening of the bids.

Advertisement, notice of. A public announcement, as required by law, inviting bids for work to be performed or materials to be furnished that indicates approximate principal quantities, location of work to be performed, character and quantity of materials to be furnished, and time and place for opening bids.

Alkali soil. Soil in which total alkali chlorides calculated as sodium chloride are more than 0.10 percent based on total solids.

Approved equal. Products, material, and other methods determined by the Owner, to meet or exceed the minimum requirements of the Contract Documents.

Award. The decision of the Owner to accept the bid of the lowest responsive and responsible bidder for the work.

Award date. The date on which the decision is made by the Owner to accept the bid of the lowest responsive and responsible bidder.

Backfill. Material used to replace or the act of replacing material removed during construction; may also denote material placed or the act of placing material adjacent to structures.

Balance point. The approximate point, based on estimated shrinkage or swell, where the quantity of earthwork excavation and borrow, if required, is equal to the quantity of embankment material plus any surplus excavation material.

Base course. A layer of material of specified thickness on which the intermediate or surface course is placed.

Bid. The offer of a bidder to perform the work and furnish the materials and labor at the prices set forth therein. Sometimes referred to as "Proposal".

Bid Documents. Documents utilized by the bidder to formulate the Bid.

Bid Proposal/Contract. The form utilized by the Contractor to submit a Bid and upon execution by the Owner constitutes the Contract between the Owner and Contractor.

Bidder. Any individual, partnership, corporation, or joint venture that formally submits a bid for the work contemplated, or for any portion thereof, acting directly or through a duly authorized representative.

Borrow. Suitable material from sources outside the project limits.

Brackish water. Water in which total alkali chlorides calculated as sodium chloride are more than 0.10 percent based on total solids.

Bridge. A structure, including supports, that is erected over a depression or an obstruction, such as water, a highway, or a railway, that has a track or passageway for carrying traffic.

Calendar day. Any day shown on the calendar.

Camber. A vertical curvature induced or fabricated into beams or girders and a deck slab or slab span formwork; a vertical curvature set in the grade line of a pipe culvert to accommodate differential settlement.

Channel. A water course or drainage way.

Complete-in-place. Work which fully conforms to all requirements of the Contract Documents.

Construction limits. The intersection of side slopes, including slope rounding, with the original ground, plus slopes for drainage ditches or incidental construction.

Contract Documents. The Bid Documents, Addenda issued prior to Bid date, Change Orders and Formal Notifications issued after Owner execution of the Bid Proposal/Contract.

Contract pay item. A specifically described unit of work for which a price is provided in the Contract Documents.

Contract time limit. The number of calendar days or calendar date that specifies the time allowed for completion of the work described in the Contract Documents, including authorized extensions.

Contractor. Any individual, partnership, corporation, or joint venture that contracts with the Owner to perform the prescribed work.

Cul-de-sac. An area at the terminus of a dead-end street or road that is constructed for the purpose of allowing vehicles to turn around.

Culvert. A structure that is not classified as a bridge which provides an opening under any roadway.

Cut. The portion of a roadway formed by excavating below the surface of the earth.

Day. Unless otherwise stated, a calendar day.

Deflection. The vertical movement occurring between the supports of a bridge superstructure or its components (beams, girders, and slabs) that results from their own weight and from dead and live loads. Although all parts of a structure are subject to deflections, usually only those deflections that occur in the superstructure are of significance during construction.

Department. City of Virginia Beach; Owner.

Disincentive. A monetary deterrent used to discourage the Contractor from exceeding the contract time limit.

Disposable material. Material generally found to be unsuitable, or material that is surplus.

Disposal areas. Areas generally located off the project right of way where unsuitable or surplus material is deposited.

Drainage ditch. An artificial depression constructed to carry off surface water.

Earthwork. The work consisting of grubbing, drainage, excavation, borrowing, grading, placing rock, and preparing subgrades.

Easement (Right of way). A grant of the right to use property for a specific use.

Embankment. A structure of soil, soil aggregate, or broken rock between the existing ground and subgrade.

Employee. Any person working on the project specified in the Contract Documents who is under the direction or control of or receives compensation from the Contractor or subcontractor.

Equipment. Machinery, tools, and other apparatus, together with the necessary supplies for upkeep and maintenance, that are necessary for acceptable completion of the work.

Extra work. An item of work that is not provided for in the Contract Documents as awarded but that is found to be essential to the satisfactory fulfillment of the Contract within its intended scope.

Falsework. A framework of wood or steel used to support forms for the construction of concrete or provide temporary support for structural units during the construction or reconstruction of permanent supports.

Federal agencies or officers. An agency or officer of the federal government and any agency or officer succeeding in accordance with law to the powers, duties, jurisdictions, and authority of the agency or officer mentioned.

Formwork. A temporary structure or mold used to retain the plastic or fluid concrete in its designated shape until it hardens.

Frontage street or road. A local street or road auxiliary to and located on the side of a highway for service to abutting property and adjacent areas and control of access.

Gage. U.S. Standard Gage.

Grade separation. Any structure that provides a traveled way over or under another traveled way or stream.

Highway. The entire right-of-way reserved for use in constructing or maintaining the roadway and its appurtenances.

Holidays. The days specifically set forth in Section 105.09.

Incentive. A monetary amount used to encourage the Contractor to complete work prior to the time limit specified in the Contract.

Inspector. The Owner's authorized representative who is assigned to make detailed inspections of the quality and quantity of the work and its conformance to the provisions of the Contract Documents.

Invert. The lowest point in the internal cross section of a pipe or other drainage structure.

Joint venture. Two or more individuals, partnerships, corporations, or combinations thereof that join together for the purpose of bidding on and constructing a project.

Laboratory. Any testing laboratory that may be designated by the Owner.

Liquidated damages. Compensation to the Owner for delays caused by Contractor, beyond the Contract Time Limit.

Material. Any substance that is used in the work specified in the Contract Documents.

Median. The portion of a divided highway that separates the traveled ways.

Notice to Proceed. A written notice to the Contractor that advises him of the date on which prosecution of the work shall begin.

Owner. City of Virginia Beach.

Pavement structure. The combination of subbase, base, and surface courses that is placed on a subgrade to support the traffic load and distribute it to the roadbed.

Phase inspection. The inspection of work at predetermined stages in lieu of continuous inspection.

Prebid conference. The scheduled event at which the Owner's representative meets with prospective bidders to describe and answer questions regarding the proposed work.

Profile grade. The line of a vertical plane intersecting the top surface of the proposed wearing surface, usually along the longitudinal center line of the roadbed.

Project. The work specified to be performed in the Contract Documents.

Project Drawings/Plans. The approved plans and standard drawings, profiles, typical cross sections, computer output listings, supplemental drawings or exact reproductions thereof, and all subsequent approved revisions thereto that show the location, character, dimensions, and details of the work specified in the Contract Documents.

Project Limits. Area depicted on the project drawings for the Contractor's use in construction of the project.

Project Manual. The document prepared by the Owner for prospective bidders that describes the work for which bids will be accepted; includes the official form on which the Owner requires bids to be submitted for the work described.

Ramp. A connecting roadway between two highways or traveled ways or between two intersecting highways at a grade separation.

Right of way. A general term denoting land, property, or interest therein, usually in a strip, that is acquired for or devoted to transportation facilities but is not meant to denote the legal nature of Ownership.

Road/Street. A general term denoting a public way for purposes of vehicular travel including the entire area within the right-of-way; the entire area reserved for use in constructing or maintaining the roadway and its appurtenances.

Roadbed. The graded portion of a highway within the top and side slopes that is prepared as a foundation for the pavement structure and shoulders.

Roadbed material. The material below the subgrade in cuts, embankments, and embankment foundations that extends to a depth which affects the support of the pavement structure.

Roadside. A general term that denotes the area within the right of way that adjoins the outer edges of the roadway; extensive areas between the roadways of a divided highway.

Roadside development. Items that are necessary to complete a highway that provides for the preservation of landscape materials and features; rehabilitation and protection against erosion of areas disturbed by construction through placing seed, sod, mulch, and other ground covers; and such suitable plantings and other improvements as may increase the effectiveness and enhance the appearance of the highway.

Roadway. The portion of a highway within the limits of construction and all structures, ditches, channels, and waterways that are necessary for the correct drainage thereof.

Sea water. Water in which total alkali chlorides calculated as sodium chloride are more than 0.10 percent of total solids.

Select borrow. Borrow material that has specified physical characteristics.

Select material. Material obtained from roadway cuts, borrow areas, or commercial sources that is designated or reserved for use as a foundation for the subbase, subbase material, shoulder surfacing, or other specified purposes.

Shop drawings. Fabrication, erection and setting drawings; manufacturers' standard drawings; schedules, descriptive literature, catalogs, brochures; performance and test data; wiring and control diagrams and all other descriptive data pertaining to the materials and equipment as required to demonstrate compliance with the contract documents.

Shoulder. The portion of the roadway contiguous with the traveled way that is for the accommodation of stopped vehicles, emergency use, and lateral support of the base and surface courses.

Sidewalk. The portion of the roadway constructed primarily for use by pedestrians.

Skew. The acute angle formed by the intersection of a line normal to the center line of the roadway with a line parallel to the face of the abutments or, in the case of culverts, with the center line of the culverts.

Special provision. A document that sets forth specifications or requirements for a particular project.

Special provision copied note/supplemental specification. A document that sets forth specifications or requirements, usually limited in scope, for a particular project.

Specialty item. An item of work designated as "Specialty Item" in the proposal that is limited to work which requires highly specialized knowledge, craftsmanship, or equipment that is not ordinarily available in contracting organizations and is usually limited to minor components of the overall Contract Documents.

Specifications. A general term that includes all directions, provisions, and requirements contained in the Project Manual (to include the VDOT "Road and Bridge Specifications", Divisions II thru VII, dated January 2016, as amended in the City of Virginia Beach Amendments to the VDOT "Road and Bridge Specifications," Divisions II - VII, dated October 1, 2017, the 2016 edition of the Virginia Department of Transportation "Road and Bridge Standards" and those that may be added or adopted as special provisions, or special provision copied notes, or supplemental specifications.

Standard drawings. Applicable drawings in VDOT's "Road and Bridge Standards," Owner Standard Details, and such other standard drawings as are referred to in the Contract Documents.

State. Commonwealth of Virginia.

Station. When used as a definition or term of measurement, 100 linear feet.

Structures. Bridges, culverts, catch basins, inlets, retaining walls, cribs, manholes, end walls, pump stations, buildings, steps, fences, sewers, service pipes, underdrains, foundation drains, and other features that may be encountered in the work and are not otherwise classed herein.

Subbase. A layer(s) of specified or selected material of designed thickness that is placed on a subgrade to support a base course.

Subcontractor. Any individual, partnership, corporation, or joint venture to whom the Contractor subcontracts part of the work.

Subgrade. The top surface of a roadbed shaped to conform to the typical section on which the pavement structure and shoulders are constructed.

Subgrade stabilization. The modification of roadbed soils by admixing with stabilizing or chemical agents that will increase the load bearing capacity, firmness, and resistance to weathering or displacement.

Substructure. The part of a structure that is below the bearings of simple and continuous spans, skewbacks of arches, and tops of footings of rigid frames, together with the back walls, wingwalls, and wing protection railings.

Superintendent. The executive representative of the Contractor who is authorized to receive and fulfill instructions from the Owner and who supervises and directs the construction. The role of the superintendent cannot be assigned to any subcontractor or anyone not in the direct employment of the Contractor.

Superstructure. The portion of a structure that is not defined as substructure.

Surety. A corporate entity bound with and for the Contractor for full and complete fulfillment of the Contract and for payment of debts pertaining to the work.

Surface course. One or more layers of a pavement structure designed to accommodate the traffic load, the top layer of which resists skidding, traffic abrasion, and disintegrating effects of weather. The top layer is sometimes called the wearing course.

Surplus material. Material that is present on a project as a result of unbalanced earthwork quantities, excessive swell, slides, undercutting, or other conditions beyond the control of the Contractor.

Suspension. A written notice issued by the Owner to the Contractor that orders the work on a project to be stopped wholly or in part as specified. The notice will include the reason for the suspension.

Temporary structure. Any structure that is required to maintain traffic while permanent structures or parts of structure specified in the Contract Documents are constructed or reconstructed. The temporary structure shall include earth approaches.

Ton. A short ton; 2,000 pounds avoirdupois.

Top of earthwork. The uppermost surface of the excavation, exclusive of select material, that is shaped to conform with the typical section.

Traveled way. The portion of the roadway for the movement of vehicles, exclusive of shoulders.

Unsuitable material. Material designated, by the Owner, to be unsuitable for the purpose intended.

Vouchered. The action of approval by the Owner; constitutes the date of release to the Department of Finance for payment.

Work. The furnishing of all materials, labor, tools, equipment, and incidentals necessary or convenient for the successful completion of the project and the carrying out of the duties and obligations specified in the Contract Documents.

Working drawings. Stress sheets, shop drawings, erection plans, falsework plans, framework plans, cofferdam plans, bending diagrams for reinforcing steel, or any other supplementary plans or similar data the Contractor is required to submit to the Owner for review.

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS

SECTION 102.01 - ADVERTISEMENT FOR BID

PROJECT:

CIP _____
CONSTRUCTION OF _____
CITY OF VIRGINIA BEACH, VIRGINIA, BID NUMBER _____

The City of Virginia Beach, Virginia will receive sealed bids for the furnishing of all equipment, labor and material, and the performing of all work for the above described project.

RECEIPT OF BIDS:

All bids must be time stamped no later than 3:00 p.m. (local time), _____, by the Office of the Purchasing Agent, in the Purchasing Division, 2388 Liberty Way, Kempsville Building, Virginia Beach, Virginia 23456. Bids time stamped 3:01 p.m. or later will not be considered, and will be returned unopened to the prospective bidder. The remaining bids will be publicly opened and read aloud thereafter.

Bid Documents may be inspected at the Builders and Contractors Exchange, Inc., 1118 Azalea Garden Road, Norfolk, Virginia 23502; A & E Reprographics, Inc., 100 Aragona Blvd., Suite 103, Virginia Beach, VA 23462.

Bid documents may be obtained by appointment only from the office of _____
_____
Phone No. _____, Between _____:_____a.m. and _____:_____ p.m. Monday through Friday, upon payment of a deposit of _____ dollars. Deposit checks shall be made payable to _____.

The work includes_____
_____
_____
_____
_____

A pre-bid conference will be held on _____ at 10:00 a.m. at the Purchasing Division, 2388 Liberty Way, Kempsville Building, Virginia Beach, Virginia 23456.

The procedure for withdrawal of bid due to error shall be per Section 2.2-4330 of the 1950 Code of Virginia, as amended.

ALL BIDDERS ARE ADVISED THAT THERE IS A REQUIREMENT FOR THE PREPARATION AND INCLUSION OF A SWAM-CERTIFIED SMALL BUSINESS SUBCONTRACTING PARTICIPATION PLAN. WHERE THE CONTRACTOR INTENDS TO UTILIZE SUBCONTRACTORS, AT LEAST 50% OF THE VALUE OF THE SUBCONTRACTED WORK SHALL BE PROVIDED BY ONE OR MORE SWAM-CERTIFIED SMALL BUSINESSES, OR THE CONTRACTOR MUST PROVIDE DOCUMENTATION SHOWING, WITH SPECIFICITY, THE GOOD FAITH EFFORTS UNDERTAKEN TO MEET THE 50% SWAM USAGE REQUIREMENT. IF THE SWAM-CERTIFIED SMALL BUSINESS PARTICIPATION PLAN DOES NOT MEET THESE REQUIREMENTS, THE ENTIRE BID SHALL BE DEEMED NONRESPONSIVE. TO ENCOURAGE CONTRACTING WITH MINORITY OWNED VENDORS, THE CITY COUNCIL ALSO ADOPTED A 12% MINORITY CONTRACTING ASPIRATIONAL GOAL.

THE CITY OF VIRGINIA BEACH DOES NOT DISCRIMINATE AGAINST FAITH BASED ORGANIZATIONS.

Bids delivered by mail should be sent to:

City of Virginia Beach
Purchasing Division
2388 Liberty Way
Kempsville Building
Virginia Beach, Virginia 23456

If you are physically disabled or visually or hearing impaired and need assistance in obtaining or inspecting the bid documents please call the Purchasing Agent's Office at 385-4438. For hearing impaired dial 711.

Mitchell D. Frazier, CPPB
Contracting Agent

SECTION 102.02 - INSTRUCTIONS TO BIDDER

The Owner, in making copies of Bid Documents available does so only for the purpose of obtaining Bids for the work and does not confer or license or grant permission for any other purpose.

A. Deposit Refund. A full refund will be made to bonafide bidders for sets returned within ten days after bid opening, in good, unmarked and complete condition.

B. Modifications or Withdrawal of Bids Prior to Time of "Receipt of Bids".

1. Modifications or withdrawal of proposals filed with the Owner may be made only by a representative of the firm submitting the bid, who must appear in person prior to the time designated in the advertisement for receipt of bids. Such representative must furnish satisfactory identification and proof that they are authorized to make changes. Telegraphic or facsimile notices will not be considered. Additions and/or deletions marked on the outside of the proposal envelope will not be considered.

C. Withdrawal of Bids After Bid Opening:

1. In accordance with Section 2.2-4330, Code of Virginia, as amended, if the price bid was substantially lower than the other bids 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, as 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 and provided further the bidder shall give notice in writing of his claim within two business days after the conclusion of the bid opening procedure.

2. No bid may be withdrawn under this section when the result would be awarding of the contract on another bid to the same bidder or to another bidder in which the Ownership of the withdrawing bidder is more than five percent.

3. If a bid is withdrawn under the authority of this section, the remaining bids shall be evaluated to determine the lowest responsive and responsible bidder.

4. 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 awarded, or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted.

5. If withdrawal of any bid is denied, the bidder shall be notified in writing stating the reasons for this decision. Any bidder who desires to appeal a decision denying withdrawal of bid shall, as sole remedy, institute legal action provided by Section 2.2-4358 and Section 2.2-4364, Code of Virginia, 1950, as amended.

D. Bid Security:

1. Each bid shall be accompanied by a bidder's bond issued by a company authorized and licensed to transact business as surety in the State of Virginia, a certified check, or cash escrow, in an amount equal to not less than five (5) percent of the total amount of the bid, made payable to the Treasurer, City of Virginia Beach, Virginia. Upon City Attorney approval, in accordance with Section 2.2-4338, Code of Virginia, 1950, as amended, a bidder may furnish a personal bond, property bond, or bank or savings and loan association's letter of credit on certain designated funds for the amount required for the bid bond. The bid bond shall be accompanied by a certified copy of the power of attorney for the surety attorney-in-fact. Said bid security shall be left with the Owner, subject to the conditions specified herein, as a guarantee of good faith on the part of the bidder that if the bid is accepted, the bidder shall execute the contract. All other bid security shall be returned after 90 days from opening of bids.

E. Certification and Licensing of Bidders:

1. Bidders are required under Section 54.1-1100, Code of Virginia, 1950, as amended, to show evidence of certification or licensing by the State Board for Contractors before any bid may be received and considered.

2. Chapter 5, Title 59.1, Code of Virginia, 1950 as amended, requires anyone transacting business in the State under an assumed or fictitious name to file a certificate of Ownership with the Clerk's Office of the Virginia Beach Circuit Court. Limited partnership, limited liability companies or corporations transacting business in the State under an assumed or fictitious name are required to also file a Certificate of Ownership with the Clerk of the State Corporation Commission.

F. Definition of Bid Documents:

1. Bid documents include the project manual, and all references therein, project drawings, all addenda issued prior to bid date, the Virginia Department of Transportation 2016 "Road and Bridge Specifications", Divisions II thru VII, as amended in the City of Virginia Beach Amendments to the Virginia Department of Transportation 2016 "Road and Bridge Specifications," Divisions II - VII, dated October 1, 2017, the 2016 edition of the Virginia Department of Transportation "Road and Bridge Standards", the City Ordinance entitled "Erosion, Sedimentation Control and Tree Protection", as amended, and the Virginia Soil and Water Conservation Commission "Virginia Erosion and Sediment Control Handbook" as amended, the "Manual of Uniform Traffic Control Devices" published by the U.S. Department of Transportation, Federal Highway Administration as amended, Virginia Department of Transportation Work Area Protection Manual, as amended, and the "City of Virginia Beach, Department of Public Utilities, Standard Details", as amended, and the “City of Virginia Beach, Department of Public Works, Specifications and Standards", as amended.

2. Enumeration of Bid Documents

Project Manual for the Construction of _____
CIP : _____
Bid Number: _____

Project Drawings:

Sheet No.	Title	Date

G. Bidders Representation:

1. Each bidder by making his bid represents that:

a. He has read and understands the bidding documents and his bid is made in accordance therewith.

b. He has visited the site and has familiarized himself with the local conditions under which the work is to be performed.

c. His bid is based upon the materials, systems and equipment which meet or exceed those described in the bidding documents.

H. Proposals:

1. Proposals must be made in strict accordance with the "Bid Proposal/Contract" form. All blank spaces for bids, and unit prices shall be properly filled in without any lineations, alterations or erasures. The failure to provide the bid tabulation including ALL UNIT PRICES shall result in the bid being declared NON-RESPONSIVE. Each proposal must be signed and notarized with full name and physical address of bidder. If a joint venture, a member of the firm with name in full of each member, and if a corporation, by an officer of corporation, in corporate name with corporate seal to such signature.

2. Proposals shall be addressed as in Advertisement for Bid and shall be delivered enclosed in an opaque, sealed envelope and clearly marked as stipulated below:

   Contractor's name:

   Contractor's address:

   "Bid Proposal/Contract for CIP _____, Construction of _____,
   City of Virginia Beach, Virginia, Bid No. _____.

   "Virginia Contractor License/Certification No._____, Class _____"

   This bidder is/is not in possession of a current City of Virginia Beach business license.

   This bidder hereby acknowledges receipt of addenda No.__ to __ inclusive.

I. Bulletins, Addenda and Interpretation:

1. Should bidder find discrepancies and/or ambiguities in or omissions from the bidding documents, or should he be in doubt as to their meaning, he should at once Notify the Owner in writing, who will provide clarification in the form of an addendum. Prior to submitting a bid it shall be bidder's responsibility to make inquiry as to addenda issued.

2. All questions relative to the bid documents must be submitted at least ten calendar days prior to bid opening, to assure distribution of information in the form of an addendum, to all document holders of record. After this, no questions, clarifications, or interpretation of bidding documents will be considered until after bids are opened.

J. Gifts by Bidder, Contractors or Subcontractors:

1. No bidder, offeror, contractor or subcontractor shall confer upon the city employee having official responsibility for a 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 is exchanged.

K. Kickbacks:

1. No contractor or subcontractor shall demand or receive from any of his suppliers or his subcontractors, as an inducement for the award of a subcontractor or order, any payment, loan, subscription, advance deposit of money, services or anything, present or promised, unless consideration of substantially equal or greater value is exchanged.

2. No subcontractor or supplier shall make, or offer to make, kickbacks as described in this section. No person shall demand or receive any payment, loan subscription, advance deposit of money, services or anything of value in return for an agreement not to compete on a public contract.

3. If a subcontractor or supplier makes a kickback or other prohibited payment as described in this section, the amount thereof shall be conclusively presumed to have been included in the price of the subcontract or order and ultimately borne by the Owner and will be recoverable from both the maker

and recipient. Recovery from one offending party shall not preclude recovery from other offending parties.

L. SWaM Certified-Small Business Participation Efforts:

1. It is the policy of the City of Virginia Beach to encourage the equitable participation of vendors in City Contracting. **To encourage contracting with minority owned vendors, the City Council adopted a 12% minority contracting aspirational goal.** To encourage contracting with woman-owned, minority-owned, service-disabled veteran-owned businesses, and small businesses, the City Council adopted the **Small Business Enhancement Program**, which was most recently updated April 22, 2014. *See* City Code §2-224.1, et seq.

2. For purposes of this subsection, the definitions used shall have the meanings provided by City Code § 2-224.1. Of particular import, "**SWAM-certified Small Business**" means a business that has been certified by the Virginia Department of Small Business and Supplier Diversity. "**Good Faith Participation Efforts**" means the sum total of efforts by a particular bidder to provide for the equitable participation of SWAM-certified Small Business subcontractors in response to a City procurement.

3. **Outreach.** Bidders are strongly encouraged to ask for an outreach list on any bid. Such a list will provide the SWAM-certified Small Businesses in the relevant industry sectors located within 50 miles of the City. Additionally, if a pre-bid meeting is held, the staff of the Purchasing division will provide resources for locating SWAM-certified Small Businesses

4. **Required Submittals:**

   a. Annually, bidders are required to file a "**Prime Contractor Workforce Composition Form**." If this is not provided with the bid, Purchasing may waive this requirement as an informality and obtain such during the protest period.

   b. As a matter of responsiveness, a bidder that intends to subcontract shall include a "**Small Business Subcontracting Participation Plan**" (the "Plan") on the form provided by the City. This form is: **CVAB-E2**. This form provides: the amount of the bid to be subcontracted, the amount of the subcontracting work that will be performed by SWAM-certified Small Businesses, the name (and SWAM certification #) of proposed SWAM subcontractors, the nature of the work to be performed by the SWAM subcontractors, and the estimated dollar amount to be paid to each SWAM subcontractor, **including minority-owned vendors.** If the bidder intends to self-perform all of the work, the bidder is not required to include the Plan; however, the bidder is strongly advised to affirmatively state its intent to self-perform, if applicable. Also to be included with the Plan is documentation providing the **Good Faith Participation Efforts** undertaken by the bidder. *See* sections 5 and 6 for the substantive requirements of the Plan and the Good Faith Participation Efforts.

5. **Responsiveness Determination**. As required by the Small Business Enhancement Program, bidders that subcontract work must either: (i) provide **at least 50% of the value of the subcontracted work** to be provided by one or more SWaM-certified small businesses; or (ii) provide **documentation showing, with specificity, the Good Faith Participation Efforts undertaken** by the bidder to meet the 50% SWAM subcontractor participation requirement. **In fulfilling the 50% requirement, prime contractors are strongly encouraged to utilize minority-owned businesses as subcontractors.**

6. **Determination of Sufficiency of Good Faith Participation Efforts.** When the Plan does not provide the required 50% SWAM subcontracting participation, the Purchasing Agent will render a decision as to whether the materials submitted with the bid indicate the bidder made Good Faith Participation Efforts. The following factors are relevant to such determination: (1) what steps the bidder has taken to solicit and negotiate subcontracting bids from SWAM-certified small businesses; (2) whether the bidder utilized the City outreach list, if applicable; (3) Whether the bidder debundled or right-sized project components to allow for meaningful small business participation; (4) whether the bidder provided assistance in bonding insurance, equipment, supplies, or other assistance or services aimed at encouraging small business subcontracting; (5) whether the bidder has taken other steps to identify and engage small businesses that would be willing and able to perform the subcontracted work; and (6) whether the efforts undertaken by the bidder appear to be reasonably calculated to lead to the maximization of SWAM-certified Small Businesses.

7. **Plan Update Period.** In the 10 days after posting of notice of intent to award, the prospective contractor will be

afforded the opportunity to update or validate the Plan submitted with its bid. As required by §2-244.3(f), the City will reject proffered updates to a Plan if the update or validation substantially decreases the utilization, either by dollar amount or percentage of subcontracted work, of SWAM-certified subcontractors. Should the prospective contractor not update or validate the Plan or has an update or validation that has been rejected by the City for the reasons previously stated, the Plan submitted with the bid becomes the Final Plan. The Final Plan shall become a part of the contract with the City.

8. **Required Reporting, Penalties.** The Contractor shall be required to provide the City with monthly updates as to payments made to subcontractors listed on the Plan. This form is: **CVAB-E**. The City will review such updates and track the Contractor's progress toward fulfilling obligations to engage the subcontractors listed on the Final Plan. Prior to final payment, the Contractor shall submit a report detailing SWAM subcontractor usage. Pursuant to City Code §2-224.8, final payment may be withheld if the Contractor fails to submit the required documentation. A material misrepresentation in reporting may result in debarment. If the actual usage substantially deviates from the Final Plan, the Contractor shall provide an explanation for the deviation within 10 business days of a request by the City for such explanation. If the explanation lacks reasonable justification that rises to the level of dishonesty or in the event the contractor refuses to submit an explanation for the deviation, the contractor may be debarred from contracting with the City for a period of up to two years from the date of notification of such debarment.

M. Posting of Intent to Award Notices:

All notices of intent to award for all invitations to bid will be publicly posted for inspection in the City of Virginia Beach Purchasing Division at the following location:

City of Virginia Beach
Purchasing Division
2388 Liberty Way
Kempsville Building
Virginia Beach, VA 23456

SECTION 102.03 - BID PROPOSAL/CONTRACT

BID NO:

DATE:

PROJECT:

CONTRACTOR:

The submission of a Bid Proposal/Contract will constitute the contractual offer by the Bidder. The execution by the Owner of the Bid Proposal/Contract constitutes acceptance of the successful Bidder's offer and will constitute the Contract between the Owner and the Contractor including all of the terms and conditions set forth in the Bid Documents and all references therein, including all addenda issued subsequent thereto.

THE FOLLOWING PROPOSAL is hereby made to the City Purchasing Agent of the City of Virginia Beach, Virginia.

The Contractor hereby proposes and agrees to furnish all materials and equipment, and to perform all the labor required to complete the Project in a substantial and workmanlike manner and in strict conformity with the Bid Documents for the sum of $_____Dollars. Which shall be hereinafter referred to as the BASE BID. The BASE BID is in accordance with the prices set forth in the Schedule of Prices attached and is based on the estimate of quantities shown. Any additions or deletions to the estimated quantities shown will revise the BASE BID accordingly. The project shall be performed to the full and entire satisfaction of the Owner.

The undersigned has examined the location of the proposed work, Bid Documents and is familiar with the local conditions at the place where the work is to be performed. The undersigned also understands that all the quantities shown herein are approximate only.

The undersigned hereby acknowledges receipt of the following addenda:

Addendum Number	Dated
_____	_____
_____	_____
_____	_____
_____	_____

This bid may not be withdrawn for a period of 90 calendar days after the scheduled closing for receipt of bids.

A. Term of Contract:

1. The Contractor agrees to begin work within ten calendar days after the date of Notice to Proceed is given to it by the Owner, and that it will carry out the work with such force, and in such manner and order, and at such time and seasons as it may be directed by the Owner, and further that it will fully and entirely perform this Contract, and all work incident thereto, before the expiration of _____ consecutive calendar days. Time is of the essence in this Contract. The Contractor expressly acknowledges that in the performance of its obligations, the Owner is relying on timely performance and will schedule operations and incur obligations to third parties in reliance upon timely performance by the Contractor and may sustain substantial losses by reason of untimely performance.

B. Schedule of Payment:

1. Formal written applications which have been approved will be paid within 30 days of receipt by the Owner.

C. Termination of Contractor's Responsibilities:

1. The Contract will be considered complete upon final acceptance by the Owner. The Contractor will be notified in writing of final acceptance, and his responsibility will then cease one year from the date of final acceptance.

D. Hold Harmless - Indemnification:

1. It is understood and agreed that the Contractor hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of the Contractor, its subcontractors, agents, or employees under or in connection with this Contract or the performance or failure to perform any work required by this Contract. The Contractor agrees to indemnify and hold harmless the Owner and its agents, volunteers, servants, employees and officials from and against any and all claims, losses, or expenses, including reasonable attorney's fees and litigation expenses suffered by any indemnified party or entity as the result of claims or suits due to, arising out of or in connection with (a) any and all such damages, real or alleged, (b) the violation of any law applicable to this contract, and, (c) the performance of the work by Contractor or those for whom Contractor is legally liable. Upon written demand by the Owner, Contractor shall assume and defend at the Contractor's sole expense any and all such suits or defense of claims made against the Owner, its agents, volunteers, servants, employees or officials.

E. Modification:

1. There may be no modification of this Contract, except in writing, executed by the authorized representatives of the Owner and the Contractor.

F. Non-Assignment:

1. The Contractor shall not assign its rights and duties under this Contract without the prior written consent of the Owner.

G. Applicable Law/Compliance with all Laws/Venue:

1. Applicable Law

a. The contract shall be deemed to be a Virginia contract and shall be governed as to all matters of validity, interpretations, obligations, performance, or otherwise, exclusively by the laws of the Commonwealth of Virginia, and all questions arising with respect thereto shall be determined in accordance with such laws. Regardless of where actually delivered and accepted, this contract shall be deemed to have been delivered and accepted by the parties in the Commonwealth of Virginia.

2. Compliance with all Laws

a. Contractor shall comply with all federal, state and local statutes, ordinances, and regulations, now in effect or hereafter adopted, in the performance of scope work set forth herein. Contractor represents that it possesses all necessary licenses and permits required to conduct its business and will acquire any additional license and permits necessary for performance of this contract prior to the initiation of work. If the contractor is a corporation, Contractor further expressly represents that it is a corporation, limited liability company, or limited liability partnership in good standing in the Commonwealth of Virginia and will remain in good standing throughout the term of the contract. Contractor shall at all times observe all health and safety measures and precautions necessary for the sanitary and safe performance of the contract work.

b. Contractor agrees that it does not currently, and shall not during the performance of this contract, knowingly employ an unauthorized alien, as defined in the federal Immigration Reform and Control Act of 1986.

3. Venue

a. Any and all suits for any claims or for any breach or dispute arising out of this contract shall be maintained in the appropriate court of competent jurisdiction in the City of Virginia Beach.

H. Termination without Cause

a. The Owner may at any time, and for any reason, terminate this contract by written notice to the Contractor specifying the termination date, which shall be not less than 30 days from the date such notice is mailed.

b. Notice shall be given to the Contractor by certified mail/return receipt requested at the address set forth herein.

c. In the event of such termination, the Contractor shall be paid such amount as shall compensate him for the work satisfactorily completed, and accepted by the Owner, at the time of termination.

d. If the Owner terminates this Contract the Contractor shall withdraw its personnel and equipment, and shall cease performance of any further work under this contract, and shall turn over to the Owner any work completed or in process for which payment has been made.

I. Termination with Cause/Default/Cancellation

a. In the event that the Contractor shall for any reason or through any cause be in default of the terms of this Contract, the Owner may give the Contractor written notice of such default by certified mail/return receipt requested at the address set forth herein.

b. Unless otherwise provided, Contractor shall have ten days from the date such notice is mailed in which to cure the default. Upon failure of the Contractor to cure the default, the Owner may immediately cancel and terminate this Contract as of the mailing date of the default notice.

c. Upon termination, the Contractor shall withdraw its personnel and equipment, cease performance of any further work under this contract, and turn over to the Owner any work in process for which payment has been made.

d. In the event of violations of law, safety or health standards and regulations, this contract may be immediately canceled and terminated by the Owner and provisions herein with respect to opportunity to cure default shall not be applicable.

J. Environmental Considerations

a. Any cost or expense associated with environmentally related violations of the law, the creation or maintenance of a nuisance, or releases of hazardous substance, including, but not limited to, the cost of any clean up activities, removals, remediations, responses, damages, fines, administrative or civil penalties or charges imposed on the Owner, whether because of actions or suits by any governmental or regulatory agency or by any private party, as a result of the release of any hazardous substances, or any noncompliance with or failure to meet any federal, state or local standards, requirements, laws, statutes, regulations or the law of nuisance by the Contractor (or its agents, officers, employees, subcontractors, consultants, subconsultants, or any other persons, corporations or legal entities employed, utilized, or retained by the Contractor) in the performance of this contract or related activities, shall be paid by the Contractor. This paragraph shall survive the termination, cancellation or expiration of this Contract.

K. FAITH BASED – NONDISCRIMINATION

THE CITY OF VIRGINIA BEACH DOES NOT DISCRIMINATE AGAINST FAITH BASED ORGANIZATIONS

L. Non-Discrimination/Drug-Free Workplace Provisions

a. Employment discrimination by Contractor shall be prohibited. During the performance of this Agreement, Contractor agrees as follows:

1. Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification/consideration reasonably necessary to the normal operation of Contractor. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

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

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

4. Contractor will include the provisions of the foregoing Sections 1, 2, and 3 in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

b. During the performance of this Agreement, Contractor agrees as follows:

1. Contractor will provide a drug-free workplace for Contractor's employees.

2. Contractor will 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 Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition.

3. Contractor will state in all solicitations or advertisements for employees placed by or on behalf of Contractor that Contractor maintains a drug-free workplace.

4. Contractor will include the provisions of the foregoing Sections A, B and C in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

M. Anti-Collusion

a. In the preparation and submission of this bid, the bidder did not either directly or indirectly, enter into any combination or agreement with any person, firm 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.

b. The undersigned bidder hereby certifies that neither this bid nor any claim resulting there from, is the result of, or affected by, any act of collusion with, or any act of another person or persons, firm or corporation engaged in the same line of business or commerce; and that no person acting for or employed by the City of Virginia Beach has any personal interest in this bid.

c. The undersigned hereby further agrees that upon request of the Owner, the records and books pertaining to this bid will be voluntarily supplied, furnished, and released to the Owner.

d. The undersigned hereby further certifies that the bidder has not knowingly falsified, concealed, misled, or covered up by any trick, scheme, or device a material fact in connection with this bid. The undersigned also certifies that the bidder has not made any false, fictitious or fraudulent statements or representations or made or used any false writing or documents knowing the same to contain any false, fictitious or fraudulent statement or entry in connection with this bid.

e. The undersigned further agrees that the bidder will comply with Section 2.2-4374, Code of Virginia, 1950, as amended, and has not bought or purchased any equipment from any person employed by the Owner as an independent contractor to furnish architectural or engineering services for this project, nor from any partnership, association or corporation in which such architect or engineer has a pecuniary interest.

f. The undersigned further agrees to require all subcontractors, consultants, subconsultants, or any other persons, corporations, or legal entities providing or furnishing labor, material, equipment or work related to this project to execute this anti-collusion statement as a condition of payment. This paragraph is expressly limited to those in a direct contractual relationship with the undersigned of over $10,000 except those persons whose only direct contractual agreement with the undersigned is an employment contract.

g. All Covenants and Agreements made by the Contractor are made by it on behalf of the Contractor and its successors, personal representatives and assigns, the same as if they had been specifically named in each instance.

N. Proprietary Information

Offerors are advised that Section 2.2-4342 of the Code of Virginia, i.e., the Virginia Public Procurement Act, shall govern public inspection of all records submitted by the Offeror. Specifically, if Offeror seeks to protect any proprietary data or materials, pursuant to Section 2.2-4342, **Offeror shall (i) invoke the protections of this section prior to or upon submission of the data or other materials, (ii) identify the data or other materials to be protected, and (iii) state the reasons why protection is needed.** Furthermore, the Offeror shall submit proprietary information under separate cover, and the Owner reserves the right to submit such information to the City Attorney for concurrence of the Offeror's claim that it is in fact proprietary. References may be made within the body of the proposal to proprietary information; however, all information contained within the body of the proposal not labeled proprietary or otherwise not meeting all three of the requirements of Section 2.2-4342 shall be public information in accordance with State statutes.

O. Liquidated Damages

The parties agree that the Owner will be substantially damaged in amounts that will be difficult or impossible to determine if actual Completion is not achieved by the Contractor on or before the Contract Time Limit set forth herein. The parties therefore agree that if Completion does not occur by the Contract Time Limit for any reason not the fault of the Owner or otherwise constituting an excusable delay, the Owner shall be entitled to liquidated damages at the daily rate set forth in the Schedule of Liquidated Damages in Section 108.11, Table I for each day the actual Completion of the project, or any phase thereof, is delayed beyond the Contract Time Limit in lieu of actual damages for such delays. Contractor hereby waives any defense as to the validity of such liquidated damages as set forth herein on the grounds that such liquidated damages are void as penalties or are not reasonably related to actual damages. "Completion" shall mean the satisfaction of all of the following criteria: all items of the work have been constructed and inspected, and a letter of acceptance has been issued by the Owner.

P. Submission and Disposition of Claims

Prompt knowledge by the Owner of an existing or impending claim for damages or other relief may alter the plans, scheduling, or other action of the Owner and/or result in mitigation or elimination of the effects of the claim. Therefore, a written statement providing the Owner with notice of the Contractor's intention to file a claim which (i) describes the act or omission by the Owner or its agents that the Contractor contends caused it damages or entitles it to other relief; and (ii) provides a description of the nature and amount of the claim. Such written statement shall be submitted to the Owner within 20 days of the time of the occurrence or beginning of the work upon which the claim is based; provided, however, if such damage is deemed certain in the opinion of the Contractor to result from its acting on an order from the Owner, it shall immediately take written exception to the order. For purposes of this provision, "claim" shall include, without limitation, any request for an increase in the contract price or time and any request for equitable adjustment. Submission of a notice of claim as specified shall be mandatory, and failure to submit such notice shall be a conclusive waiver to such claim for damages or other relief by the Contractor. Neither an oral notice or statement, nor an untimely notice or statement will be sufficient to satisfy the requirements herein.

The Owner will review the claim and render a final decision in writing within 30 days of receipt of Contractor's written request for a final decision. Such decision shall be final and binding to the fullest extent allowed by law.

Q. Prompt Payment to Subcontractor

In accordance with Title 2.2, Subtitle II, Part B, Chapter 43, Article 4, of the Code of Virginia (Virginia Public Procurement Act), the Contractor shall make payment to all subcontractors, as defined in the Code, within 7 days after receipt of payment from the Owner; or, shall notify the Owner and the subcontractor in writing of the intention to withhold all or part of the amount due along with the reason for nonpayment. In the event payment is not made as noted, the Contractor shall pay interest at the rate of 1 percent per month, unless otherwise provided in the contract, to the subcontractor on all amounts that remain unpaid after 7 days except for the amount withheld as provided herein.

The same requirements shall be included in each subcontract and shall be applicable to each lower-tier subcontractor. The Contractor shall provide Owner with its social security number or federal taxpayer identification number prior to any payments under this Contract.

The Contractors obligation to pay an interest charge to a subcontractor pursuant to the payment clause in this section may not be construed to be an obligation of the Owner. A contract modification may not be made for the purpose of providing reimbursement for such interest charge. A cost reimbursement claim may not include any amount for reimbursement for such interest charge.

Virginia Contractor License/Certification No. _____, Class _____

The date of expiration of the City of Virginia Beach business license is _____

Telephone Number (___) _____ _____
Title

Fax Number (___) _____

Is your Firm a "Minority" business Yes or No
(Please Circle One)

If yes, please indicate the "Minority" classification:

☐ African American ☐ Hispanic American ☐ American Indian

☐ Eskimo ☐ Asian American ☐ Aleut

☐ Other; Please Explain: _____

[The physical address space below applies to all Contractors]

Physical Address of Contractor (No Post Office Box Numbers)

_____
Name of Contractor

_____

_____

_____
Address

[If Contractor is an individual]

In witness whereof, the Contractor, has caused this Contract to be executed in its name and on its behalf by its President and its Seal hereunto affixed and with due authority by its Board of Directors.

Witness the following signature and seal:

_____ (SEAL)

_____
NAME

BY_____
PRESIDENT

Virginia Code 47.1-14
He/She/They is/are personally known to me or has/have produced _____as identification.

STATE OF

CITY/COUNTY OF _____, to-wit:

The foregoing Contract was acknowledged before me this ____ day of _____,

201___, by _____.

[AFFIX NOTARY SEAL] _____
NOTARY PUBLIC

Notary Registration Number: _____

My Commission Expires: _____

[If Contractor is a corporation]

In witness whereof, the Contractor, has caused this Contract to be executed in its corporate name and on its behalf by its President and its Seal hereunto affixed and attested by its Corporate Secretary with due authority by its Board of Directors.

_____
CORPORATE NAME

BY_____
PRESIDENT

Virginia Code 47.1-14
He/She/They is/are personally known to me or has/have produced _____as identification.

STATE OF _____

CITY/COUNTY OF _____, to-wit:

The foregoing Contract was acknowledged before me this ____ day of _____,
201___, by _____(Name), President, respectively of _____
_____ (Name), a _____ corporation, on behalf of the corporation.

[AFFIX NOTARY SEAL] _____
NOTARY PUBLIC

Notary Registration Number: _____

My Commission Expires: _____

[If Contractor is a partnership, joint venture, limited liability company or other legal entity]

In witness whereof, the Contractor has caused this Contract to be executed in its name and on its behalf by _____, its _____ (Title), and _____, its _____ (Title), thereunto duly authorized.

ENTITY NAME

By _____
TITLE:

By _____
TITLE:

Virginia Code 47.1-14
He/She/They is/are personally known to me or has/have produced _____as identification.

STATE OF _____

CITY/COUNTY OF _____, to-wit:

The foregoing Contract was acknowledged before me this ____ day of _____, 201___, by _____ (Name), _____(title) and _____ _____ (Name) _____ (title), respectively of _____ (Contractor's Name), a _____ (type of entity) on its behalf.

[AFFIX NOTARY SEAL]

NOTARY PUBLIC _____

Notary Registration Number: _____

My Commission Expires: _____

Virginia Code 47.1-14
He/She/They is/are personally known to me or has/have produced _____as identification.

STATE OF _____

CITY/COUNTY OF _____, to-wit:

The foregoing Contract was acknowledged before me this ____ day of _____, 201___, by _____ (Name), _____(title) and _____ _____ (Name) _____ (title), respectively of _____ (Contractor's Name), a _____ (type of entity) on its behalf.

[AFFIX NOTARY SEAL]

NOTARY PUBLIC _____

Notary Registration Number: _____

My Commission Expires: _____

CITY OF VIRGINIA BEACH

BY: _____

CITY PURCHASING AGENT

SECTION 102.04 - SCHEDULE OF PRICES

The following is a sample bid proposal format. This is a suggested format only and is not an exhaustive list of project bid items to be included:
NOTE: [Revise to suit project. Where water and sewer construction are included in a single project, separate schedules of prices for each shall be included.]

PROJECT: Construction of (INSERT PROJECT TITLE) - (INSERT CIP NO.) Page of Bid Proposal
Bid Number:

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE IN FIGURES	TOTAL ITEM PRICE IN FIGURES
1	Mobilization	1	L.S.		
2	Clearing and Grubbing	1	L.S.		
3	Regular Excavation	11908	C.Y.		
4	Undercut Excavation	1000	C.Y.		
5	Select Borrow	1000	C.Y.		
6	Straw Bale Sediment Barrier	1288	L.F.		
7	Silt Fence	690	L.F.		
8	12" Reinforced Concrete Pipe	40	L.F.		
9	**Permit**	**??**	**??**		
	TOTAL BASE BID THIS SHEET				

SECTION 103 - AWARD AND EXECUTION OF THE CONTRACT

SECTION 103.01 - INSTRUCTIONS TO SUCCESSFUL BIDDER

A. The contract shall be awarded to the responsible and responsive bidder with the lowest Base Bid. "Responsible bidder" shall mean a person who has the capability, in all respects, to perform fully the contract requirements, and the moral and business integrity, and reliability which will assure good faith performances, and who has been prequalified, if required. "Responsive bidder" shall mean a person who has submitted a bid which conforms in all material respects to the invitation to bid.

B. Negotiation with the lowest responsive and responsible bidder:

1. The Owner reserves the right to negotiate with the lowest responsive and responsible bidder to obtain a contract price within available funds. The term "available funds" shall mean those funds which have been appropriated by the Owner for the goods or services described in the bid specifications set forth herein. The City Purchasing Agent shall initiate such negotiations by providing written notification to the lowest responsive and responsible bidder that its bid exceeds available funds.

C. The Owner reserves the right to reject any or all bids, and to waive informalities, and accept the bid in the Owner's best interests.

D. Upon issuance of the notice of intent to award, the successful Bidder shall provide the Owner with such sureties as the Owner may approve, bonds for the faithful performance of the contract, and for the payment of all persons performing labor, and furnishing materials in connection with the contract, each in an amount equal to no less than the total amount of its bid. These bonds shall remain in full force and effect during the period by which Contractor's responsibilities to the City are enforceable. Bond forms are included for this purpose. The bonds shall be accompanied by a certified copy of the power of attorney for the surety's attorney-in-fact, and shall be executed by one or more companies authorized and licensed to transact business as surety in the State of Virginia.

E. The successful bidder shall maintain Products and Completed Operations Insurance coverage in full force and effect for a period of five (5) years after final payment on this Contract and shall provide the Owner certificates of Insurance to this effect.

F. Insurance:

Contractor must, as a minimum requirement, provide the types and amounts of insurance coverage listed below; must furnish a waiver of subrogation in favor of Owner; and name the Owner as an additional insured to all coverage types.

The following project insurance coverages and minimum limits of coverage are required of Contractor and each Subcontractor at all times until their respective obligations under the Contract have been fully discharged: Provided, however, that if any other clause or provision of the Contract requires limits of liability for a particular type or types of coverage in excess of the limits set forth below, Contractor (and each Subcontractor) shall provide the higher limits of liability for the particular type or types of coverage:

Type of Coverage	Minimum Limits
Workers Compensation	$1,000,000 Each Occurrence
Employers Liability	$500,000 Each Accident $500,000 Disease-Policy Limit $500,000 Disease – Per Employee

Requirements:

- Voluntary Compensation Endorsement
- Waiver of Subrogation in favor of Owner and General Contractor
- United States Long Shore & Harbor Worker's Endorsement
- Jones Act Endorsement

Commercial General Liability	$1,000,000 Each Occurrence $2,000,000 General Aggregate Per Project $2,000,000 Completed Operations/Products Agg. $1,000,000 Personal Injury $ 5,000 Medical Payments Requirements: • Contractual Liability • XCU Perils Coverage • Completed Operations Extended to the 5 years or the Statute of Repose, whichever is less • Broad Form Property Damage • Fellow Employee Coverage • No Residential Exclusions shall apply • Additional Insured – Owner and General Contractor to be included as Additional Insureds per form CG 20 10 11 85 or equivalent, and this coverage shall: Include Premises/Operations coverage; Include Products/Completed Operations coverage; and, apply on a Primary and Non-Contributory Basis. • No restrictions as regards the scope of work being performed on the jobsite.
Business Automobile Liability	$1,000,000 per occurrence (combined limit for bodily injury and property damage Requirements: • Coverage Owned, Non-Owned, Hired Autos • Additional Insured – Owner and General Contractor to be included as Additional Insureds
Excess Liability	General Contractor: $5,000,000 per occurrence $5,000,000 aggregate Sub-Contractors: $1,000,000 per occurrence $1,000,000 aggregate Requirements: • Additional Insured – Owner and General Contractor to be included as Additional Insureds utilizing form CG 20 10 11 85 or equivalent, and this coverage shall apply excess of all underlying coverages

Builder's Risk or Installation Floater: Builder's risk insurance is required for all new vertical construction; the contractor shall provide builder's risk coverage on the full insurable value of the work. For all other construction, the contractor must maintain an installation floater insuring against all risk of physical loss or damage to materials, fixtures, equipment, and supplies provided for the job, in an amount equal to the full value of the contract improvements.

Election by Owner to provide or obtain any insurance coverage type specified herein shall in no way relieve or limit any responsibility or obligation imposed by the Contract on Contractor or any subcontractor.

Prior to the Owner's execution of the Contract, Contractor shall furnish Certificates of Insurance evidencing coverages as required in previous paragraphs. An ACORD Certificate of Insurance or pre-approved substitute is the required form.

Each Certificate of Insurance shall include the Owner as an additional insured, on a primary and non-contributory basis, for all liability coverage on the Certificate of Insurance and evidence a thirty (30) day prior written notice of cancellation and include a Waiver of Subrogation. As part of the aforesaid written notice, the Contractor must submit proof that the Owner will be provided with at least ten (10) day written notice prior to cancellation of the liability coverage for non-payment of premium. The Certificate of Insurance holder shall be identified as City of Virginia Beach. Contractor shall include in the contract price all costs for insurance.

Indemnification

In addition to Contractor's indemnification obligations under the Contract, in any and all claims against the Owner or any of its agents or employees by any employee of the Contractor, any Subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, Contractor's indemnification obligations shall not be limited in any way by any limitation on the amount or type or damages, compensation or benefits payable by or for the Contractor or any Subcontractor under Workers compensation acts, disability benefit acts or any other employee benefit acts. Contractor waives (and shall cause its Subcontractors and suppliers of any tier to waive) any and all statutory and/or constitutional immunity to which, but for this waiver, it might be entitled (1) as an employer in compliance with any workers compensation laws, or (2) under any other employee benefits statutes or similar laws of any jurisdiction.

Safety

Safety for the job site shall be the full and sole responsibility of the Contractor. The Project shall have a safety person provided by the Contractor. All subcontractors on the job site shall be responsible for adhering at a minimum to the requirements set forth by OSHA standards to include 6-foot fall protection, pre-employment drug testing, return to work program, hard hats, safety glasses, as well as any and all other OSHA requirements for safety.

G. Upon satisfactory review of such documents and information by Owner, Owner will execute the Contract and issue the Notice to Proceed.

H. Failure or neglect by the successful Bidder to furnish all required bonds, insurance certificates and other required information within ten days, shall constitute a breach of the bid. The damages to the Owner for such breach will include loss from interferences with its construction program and other items whose accurate amount will be difficult or impossible to compute. The amount of the surety accompanying the proposal of such bidder shall be retained by the Owner as liquidated damages for such breach.

I. A bidder may be required to complete and submit the questionnaire attached hereto following, if requested by the Owner, within ten calendar days after receipt of said request. All questions thereon shall be answered fully.

J. Audits: The Owner shall have the right to audit all books and records (in whatever form they may be kept, whether written, electronic or other) relating or pertaining to this Contract (including any and all documents and other materials, in whatever form they may be kept, which support or underlie those books and records), kept by or under the control of Contractor, including, but not limited to, those kept by Contractor, its employees, agents, assigns, successors and subcontractors. Contractor shall maintain such books and records, together with such supporting or underlying documents and materials, for the duration of this Contract and for at least three (3) years following the completion of the Contract, including any and all renewals thereof. The books and records, together with the supporting or underlying documents and materials shall be made available, upon request, to the Owner, through its employees, agents, representatives, contractors or other designees, during normal business hours at Contractor's office or place of business in Virginia Beach, Virginia. In the event that no such location is available, then the books and records, together with the supporting or underlying documents and records, shall be made available for audit at a time and location in Virginia Beach, Virginia that is convenient for the Owner. This paragraph shall not be construed to limit, revoke, or abridge any other rights, powers, or obligations relating to audit which the Owner may have by state, city, or federal statute, ordinance, regulation, or agreement, whether those rights, powers, or obligations are express or implied.

K. Offset/Setoff: The City may withhold the payment of any claim or demand by any person, firm or corporation against the City until any delinquent indebtedness or other liability, including taxes, due to the City from such person, firm or corporation shall first have been settled and adjusted.

SECTION 103.02 – CONTRACTOR PERFORMANCE EVALUATION (CPE)

A tool developed by the City to provide standardized historical contractor performance information across department lines which will be maintained on file for reference purposes in future project awards. The City shall complete a Contractor Performance Evaluation on all City projects. **Copy of form provided under the mandatory specifications.**

SECTION 103.03 - QUESTIONNAIRE

The undersigned guarantees the accuracy of all statements and answers herein contained. (Please print in ink.)

1. How many years has your firm been in business as a General Contractor?
_____ years

2. List up to three (3) projects of this nature that you have completed and give the name, address and telephone number of a reference from each. Also, give the completed cost of each project listed.

_____
_____
_____
_____

3. List projects presently under construction by your firm, dollar volume of the contract, and the percent of completion.

_____
_____
_____
_____

4. Have you ever performed work for a municipal corporation, local governing body, or similar agency previously? (If all such bodies are listed under 2, this question need not be completed).

_____
_____
_____
_____

5. Have you ever failed to complete work awarded to you; if so, state where and why?

_____
_____
_____
_____

6. Have you or your authorized representative, personally inspected the location of the proposed work, and do you have a clear understanding of the requirements of the Bid Documents?

_____
_____
_____

7. Have you ever performed similar work under the direction of a Consulting engineer or Registered Architect? If so, list up to three such firms giving the name of the firm, its address, telephone number, and the name of the project. (List most recent projects)

_____
_____
_____

8. Give the name, address, and telephone number of an individual who represents each of the following, and who the Owner may contact to investigate your financial responsibility: a surety, a bank, and a major material supplier.

_____
_____
_____

9. Give a summary of your financial statement. (List assets and liabilities, use an insert sheet, if necessary).

_____

_____

_____

10. State the true, exact, correct, and complete name of the partnership, corporation, or trade name under which you do business, and the address of the place of business. (If a corporation, state the name of the President and Secretary. If a partnership, state the names of all general and limited partners. If a trade name, state the names of the individuals who do business under the trade name). It is absolutely necessary that this information be furnished.

_____
Correct Name of Bidder

(a) The business is a _____

(b) The address of principal place of business is _____

_____

(c) The names of the corporate officers, or partners, or individuals doing business under a trade name, are as follows:

_____

_____

_____

(d) The stockholders owning five (5) or more percent in the corporation are:

_____

_____

_____

(e) Virginia Beach Business License Number: _____

11. Name of Surety Company: _____

Dated at _____ this _____ day of _____, 201___.

By _____

STATE OF _____

CITY/COUNTY OF _____

_____, being duly sworn deposes and says that he is _____ of

and that the answers to the foregoing questions and all statements therein contained are true and correct.

Sworn to before me this _____ day of _____201___.

_____

[AFFIX NOTARY SEAL] Notary Public

Notary Registration Number: _____

My Commission Expires:_____

CITY OF VIRGINIA BEACH

CONTRACT PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____ _____ of _____ (hereinafter called the "Principal") and the _____, a corporation created and existing under the laws of the State of _____ and having its principal office in the City of _____ and authorized to transact business in the Commonwealth of Virginia as surety (hereinafter called the "Surety"), are held and firmly bound unto the CITY OF VIRGINIA BEACH (hereinafter called the "Owner") in the full and just sum of _____ _____ Dollars ($_____), lawful money of the United States of America, for the payment of which well and truly to be made, the said Principal binds itself and its successors and assigns, all jointly and severally, firmly by these presents.

WHEREAS, said Principal has entered into a certain written agreement with Owner, designated as contract number _____ and dated the ____ day of _____, 201__, for the purpose of _____ _____ _____ (hereinafter called the "Contract"), for which Contract is by reference made a part hereof.

NOW, THEREFORE, THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE SUCH THAT, if the said Principal and its successors and assigns, or any or either of them shall well and truly and in good sufficient and workmanlike manner perform or cause to be performed said Contract, and any amendment, or extension of or addition thereto and each and every of the covenants, promises, agreements, warranties, and provisions herein stipulated and contained to be performed by said Principal, and complete the same within the period therein mentioned, and in each and every respect, comply with the conditions therein mentioned to be complied with by the said Principal, and fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure so to do and fully reimburse and repay the Owner all expense which it may incur in making good any such default, then these obligations shall be null and void, otherwise they shall remain in full force and effect.

The Surety, for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligations of said Surety and of its successors and assigns, and this bond shall in no way be impaired or affected by any extension of time, modification, omission, addition or change in or to the said Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provision thereof; or by any assignment, subletting or other transfer thereof; or of any part thereof, or of any work to be performed or of any moneys due or to become due thereunder; and said Surety, for itself and its successors and assigns, does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers and hereby stipulates and agrees that any and all things done and omitted to be done by and in relation to executors, administrators, successors, assignees, subcontractors, and other transferees, shall have the same effect as to said Surety and its successors and assigns, as though done or omitted to be done by and in relation to said Principal.

Whenever Principal shall be declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations, thereunder, the Owner shall have the right, at its option, to require the Surety to promptly proceed to remedy the default within 30 days of notice by proceeding or procuring others to proceed with completing the Contract with its terms and conditions; and all reserves, deferred payments, and other funds provided by the Contract to be paid to Principal shall be paid to Surety at the same times and under the same conditions as by the terms of that Contract such funds would have been paid to Principal had the Contract been performed by Principal; and Surety shall be entitled to such funds in preference to any assignee of Principal of any adverse claimant. Notwithstanding the above, the Owner shall have the right, with the approval of the Surety which shall not be unreasonably withheld, to take over and assume completion of the Contract and be promptly paid in cash by the Surety for the cost of such completion less the balance of the Contract price.

IN WITNESS WHEREOF, the Principal and the Surety have executed this performance bond and have hereunto affixed their seals this ____ day of _____, in the year 201__.

The persons whose signatures appear below hereby represent, warrant, and certify that they are authorized to execute this performance bond on behalf of the Principal and the Surety, respectively.

PRINCIPAL

_____

By_____

_____

(CORPORATE SEAL)

SURETY

_____

_____

_____

(Mailing Address)

Phone No: _____

By_____

_____

COUNTERSIGNED: Resident Agent

State of_____

_____

By_____

_____

ATTORNEY-IN-FACT

_____

_____

(This bond shall be accompanied with attorney-in-fact's authority from Surety)

(CORPORATE SEAL)

Surety Company Bond
No._____

CITY OF VIRGINIA BEACH

CONTRACT PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____ _____ of _____ (hereinafter called the "Principal"), and the _____, a corporation created and existing under the laws of the State of _____ and having its principal office in the City of _____ and authorized to transact business in the Commonwealth of Virginia as surety (hereinafter called the "Surety"), are held and firmly bound unto the CITY OF VIRGINIA BEACH (hereinafter called the "Owner") in the full and just sum of _____ Dollars ($_____), lawful money of the United States of America, to be paid to the said Owner, its successors and assigns, to which payment well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally and firmly by these presents;

WHEREAS, the above-bounden Principal has entered into a certain written agreement with Owner, designated as contract number _____ and dated the _____ day of _____ 201__, for the purpose of _____ _____ _____ (hereinafter called the "Contract"), for which Contract is by reference made a part hereof;

WHEREAS, it was one of the conditions of the award of the Owner pursuant to which said Contract was entered into that these presents shall be executed;

NOW, THEREFORE, the condition of this obligation is such that if the above-bounden Principal promptly pays all just claims for labor and material (including public utility services and reasonable rental of equipment when such equipment is actually used at the site) performed for or supplied to said Principal or any subcontractor in the prosecution of the work contracted for, then this obligation is to be void; otherwise, to be and remain in full force and virtue in law.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

IN WITNESS WHEREOF, the Principal and the Surety have executed this payment bond and have hereunto affixed their seals this ____ day of _____, in the year 201__.

The persons whose signatures appear below hereby represent, warrant, and certify that they are authorized to execute this payment bond on behalf of the Principal and the Surety, respectively.

PRINCIPAL

(CORPORATE SEAL)

_____

By_____

_____

SURETY

_____

_____

_____

(Mailing Address)

Phone No: _____

By_____

_____

COUNTERSIGNED: Resident Agent

State of_____

_____

By_____

_____

ATTORNEY-IN-FACT

(CORPORATE SEAL)

_____

_____

(This bond shall be accompanied with attorney-in-fact's authority from Surety)

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$
	COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	CLAIMS-MADE / OCCUR						MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
							GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$
	POLICY / PRO-JECT / LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS / NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB / OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB / CLAIMS-MADE						AGGREGATE	$
	DED / RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						WC STATUTORY LIMITS / OTHER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N	N / A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

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SECTION 104 - SCOPE OF WORK

SECTION 104.01 - INTENT OF CONTRACT

The intent of the Contract is to provide for completion of the work specified therein.

SECTION 104.02 - ALTERATION OF QUANTITIES OR CHARACTER OF WORK

The Owner reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall neither invalidate the contract nor release the surety, and Contractor agrees to perform the work as altered.

A. If the alterations or changes in quantities significantly change the character of the work under contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the contract.

   The term "significant change" shall be construed to apply only to the following circumstances:

   1. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction or

   2. When an item of work is increased in excess of 150 percent or decreased below 50 percent of the original contract quantity, any allowance for an increase in the unit cost shall apply only to that portion in excess of 150 percent of original contract item quantity, or in case of a decrease below 50 percent.

B. In the event the altered or added work is of sufficient magnitude or complexity to require additional time to complete the project, an adjustment in contract time will be made in accordance with the provisions of Section 108.09.

C. Value Engineering Proposals - The Contractor may submit to the Owner, in writing, Value Engineering Proposals (VEP) for modifying the contract for the purpose of reducing the total cost of construction without reducing design capacity or quality of the finished product. If accepted by the Owner, net savings resulting from a VEP will be equally divided by the Owner and the Contractor.

   Each VEP shall result in net savings over the contract cost without impairing essential functions and characteristics of the item(s) or of any other part of the project, including but not limited to service life, reliability, economy of operation, ease of maintenance, aesthetics and safety.

   As a minimum, the following information shall be submitted with each VEP:

   1. a statement that the proposal is submitted as a VEP;

   2. a statement concerning the basis for the VEP and benefits to the Owner together with an itemization of the Contract items and requirements affected by the VEP;

   3. a detailed estimate of the cost under the existing Contract and under the VEP;

   4. proposed specifications and recommendations as to how such VEP changes are to be accomplished; and

   5. a statement as to the time by which a change order adopting the VEP must be issued so as to obtain the maximum cost effectiveness.

The Owner may accept in whole or in part any VEP by issuing a change order which will identify the VEP on which it is based. The Owner will not be liable to the Contractor for failure to accept or act upon any VEP submitted pursuant to these requirements nor for any delays to the work attributable to any such proposal. Until a proposal is effected by change order, the contractor shall remain obligated to the terms and conditions of the existing Contract. If an executed change order has not been issued by the date upon which the Contractor's proposal specifies that a decision thereon

should be made, or such other date as the Contractor may subsequently have specified in writing, such proposal shall be deemed rejected.

The change order effecting the necessary Contract modification will establish the net savings agreed upon, will provide for adjustment in the Contract prices and will indicate the net savings to be equally divided between the Contractor and the Owner. The Contractor shall absorb all costs incurred in preparing a VEP for submission to the Owner. All reasonably incurred costs for reviewing and administering the VEP will be borne by the Owner. The Owner reserves the right to include in the agreement any conditions it deems appropriate for consideration, approval and implementation of the proposal. The Contractor's 50 percent share of the net savings shall constitute full compensation to him for effecting all changes pursuant to the agreement.

Acceptance of the VEP and performance of the work thereunder will not change the Contract time limit as a result of the VEP, unless specifically provided for in the change order authorizing the VEP.

The Owner expressly reserves the right to adopt a VEP for general use in Contracts administered by the Owner when it determines that said proposal is suitable for application to other Contracts. VEP's identical or similar to previously submitted proposals will be eligible for consideration and compensation under these provisions if such proposals were not previously adopted for general application to other contracts administered by the Owner. When a VEP is adopted for general use, compensation pursuant to these requirements will be applied only to those Contracts awarded and for which the subject VEP has been submitted prior to the date of the adoption of the specific VEP.

Proposed changes in the basic design of a bridge or pavement type, or which require a different right-of-way limits, will not normally be considered as an acceptable VEP.

The Owner will be the sole judge of the acceptability of a VEP. The requirements herein apply to all VEP's initiated and developed by the Contractor and which are identified as such by the Contractor at the time of its submission to the Owner, however, nothing herein shall be construed as requiring the Owner to consider or approve a VEP submitted hereinbefore.

Subject to the provisions contained herein, the Owner shall have the right to use all or part of any accepted VEP without obligation or compensation of any kind to the Contractor.

In the event a VEP is accepted by the Owner, the provisions of Section 104.02 which pertain to adjustment of Contract unit prices due to alternations of Contract quantities will not apply to the items adjusted or deleted as a result of effecting the VEP by change order.

104.03 - DIFFERING SITE CONDITIONS

The Contractor shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the Owner verbally and within three days by written Notice of:

A. subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents; or

B. unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents.

If the Contractor fails to notify the Owner as required above, then any work performed shall be at the Contractor's risk and expense. If it is found conditions do materially differ, the contract shall be modified to provide any increase or decrease of cost and/or difference in time resulting from the changed condition.

SECTION 104.04 - MAINTENANCE DURING CONSTRUCTION.

The Contractor shall maintain the work from the beginning of construction operations until final acceptance of the project. The maintenance shall constitute continuous and effective work prosecuted day by day with adequate equipment and forces to the end that the roadway or structures are maintained in satisfactory condition at all times, including barricades and warning signs as provided in Section 107.10.

When the Contract Documents specify the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

Unless otherwise specified, the Contractor shall bear all cost of maintenance work during construction and before the project is accepted and of construction and maintaining such approaches, crossings, intersections and other features as may be necessary, without direct compensation, except as provided in (b) and (f) herein; however, when the Contractor confines its operations to a specific section of a project or to areas adjacent to, but not including the surface of the roadway and reasonable width of shoulder thereto, and the surface is not disturbed or damaged by its operations or equipment, it shall not be responsible for the maintenance of the surface which remains undisturbed or undamaged.

The Contractor shall keep the portions of the road being used by the public free from irregularities and obstructions of any character, except snow and ice removal, which might represent a hazard or annoyance to traffic and in such condition that traffic will be adequately accommodated.

A. Connections and Entrances: All connections with other roads, and public and private entrance shall be kept in a reasonable smooth condition for the safe passage of traffic at all times. Connections or entrances shall not be disturbed by the Contractor until necessary. Once connections or entrances have been disturbed, they shall be maintained and completed as follows:

1. Connections - Connections which had an original paved surface shall be brought to final grade through the intersection, and a minimum of two lanes shall be paved with the required or a temporary pavement as soon as possible after they are disturbed. All other connections shall be brought to final grade through the intersection and the required material or a temporary aggregate stabilization course placed as soon as possible after they are disturbed.

   In the event there are delays in the prosecution of the work on connections, those which were originally paved shall have a minimum of two lanes maintained with a temporary paved surface. Those which were not originally paved shall be maintained with a temporary aggregate stabilization course.

2. Entrances - Entrances shall be graded concurrently with the roadway with which they intersect. Once an entrance has been disturbed, it shall be completed as soon as practicable including the placement of the required base and surface course or stabilization. In the event the entrance must be constructed in stages (as in the case where there is a substantial change in the elevation of the roadway with which it intersects), the surface shall be covered with a temporary aggregate stabilization course or other material salvaged from the entrance or project until the entrance can be completed and the required base and surface or stabilization course placed.

   Stabilization and/or surfacing material shall be applied to connections and entrances whenever directed by the Owner.

   The Contractor shall schedule construction operations so that approved continuous access is provided to all property adjacent to the construction when such property is shown on the plans to require access. When frontage roads are shown on the plans, they shall be constructed prior to closing any access routes, unless other approved access is provided and is acceptable to the property owner.

B. Grading Operations: When new and old roads intersect or coincide, the grading shall be performed only over a part of the existing road. Cuts shall be removed or embankments constructed in layers on alternate sides of the road. The graded road shall be maintained in a passable condition, free from ruts, irregularities and any hazards to traffic.

   The Contractor shall, insofar as possible, salvage materials in the old pavements and use them for the maintenance of traffic.

   When a road is widened, rough and fine grading operations shall be conducted in such a manner as to provide maximum safety for the traffic using the roadway. When the Contractor elects to complete its rough grading operations for the entire project or to exceed the length of one full day's surfacing operations, the rough grade shall be machined to a true slope from the top edge of the existing pavement to the ditch line.

Grading operations shall be conducted in a manner which will permit the accommodation of two-way traffic, unless otherwise authorized. When the surface is to be widened on both sides of the existing pavement, construction operations involving either grading or paving shall not be conducted simultaneously on sections directly opposite each other unless specifically authorized in advance.

The existing surface of the pavement shall be kept free of earth and other materials which might be hazardous to traffic.

C. Mailboxes and Newspaper Boxes: When removal of U.S. mail and newspaper boxes is made necessary by construction operations, the Contractor shall place such receptacle in temporary locations so that their usefulness will not be impaired. Prior to final acceptance of the project, mail boxes shall be placed in their permanent locations as indicated by the Owner and left in as good condition as when found. All such mail or newspaper boxes or their supports which are damaged through negligence on the part of the Contractor shall be replaced by it. The cost of removing and resetting such mail and newspaper boxes shall be included in other appropriate pay items of the Contract.

D. Hydraulic Embankment: Where the Contractor's suction or discharge pipes cross the surface of an existing traveled highway, they shall be bridged as directed by the Owner. Traffic shall be protected by the display of warning signals both day and night. If dredging operations damage an existing traveled highway, the Contractor shall cease operations and repair damages to the highway.

E. Patching Operations: Where existing hydraulic cement concrete pavement is to be patched, the operation of breaking and excavating old pavement shall extend for a distance of not more than two miles. Patching shall be coordinated with excavating so that an area of not more than 2 mile in which excavated patches are located shall be left at the end of any day's work. Necessary precautions shall be taken to protect traffic during patching operations.

F. Temporary Structures: The Contractor shall construct, maintain, and remove temporary structures and approaches necessary for use by traffic. Unless otherwise specified in the Contract Documents, the cost of these operations shall be included in pay items for the new structure. After new structures have been opened to traffic, temporary structures and approaches shall be removed. The materials contained therein shall remain the property of the Contractor.

The proposed design of temporary structures shall be submitted to the Owner prior to the beginning of construction in accordance with Section 105.02.

G. Failure To Maintain Roadway or Structures: If the Contractor fails to remedy unsatisfactory maintenance immediately after receipt of a notice by the Owner, the Owner may proceed with adequate forces, equipment, and material to maintain the project. The cost of the maintenance, plus 25 percent for supervisory and administrative personnel, will be deducted from monies due the Contractor for the project.

H. Haul Route: The Contractor shall select haul routes between the project and material source(s) that will minimize disturbance to the community. The Contractor shall furnish the Owner, for review, his plan for the haul route and for minimizing the adverse effects of hauling operations on persons who reside adjacent to the haul route or who otherwise use a portion of the haul route for ingress or egress to their residential area. The Owner may select alternate haul routes, divide the hauling traffic over several routes, and impose other restriction deemed necessary to minimize the impact of the hauling operation on local residents.

SECTION 104.05 - REMOVING AND DISPOSING OF STRUCTURES AND OBSTRUCTIONS

The Contractor shall remove and dispose of or store, as directed by the Owner, fences, buildings, structures, or encumbrances within the project limits. Unless separate pay items for this work are included in the Contract, payment for these operations will be in accordance with Section 301.03. Materials so removed, including existing drains or pipe culverts, shall become the property of the Contractor.

SECTION 105 - CONTROL OF WORK

SECTION 105.01 - AUTHORITY OF ENGINEER - NA

SECTION 105.02 - PLANS AND WORKING DRAWINGS

Plans consisting of general drawings and showing such details as are necessary to give a comprehensive understanding of the construction contemplated will be furnished by the Owner. Project drawings will show alignment, profile, grade and typical section of the improvement. Structure plans will, in general, show all necessary dimensions. When dimensions are not shown in detail, general features as are necessary will be shown. Dimensions shown on plans such as centerline stationing, pavement widths, length of beams, girders and slabs, and wall heights are measured in the respective horizontal or vertical planes, except as otherwise shown on the plans. Such dimensions which are affected by gradients or vertical curvatures shall be adjusted as necessary to accommodate actual field conditions and shall be specifically denoted on the working or detail drawings.

The Contractor shall furnish shop drawings, not furnished by the Owner, as may be required. Shop drawings shall not incorporate any changes from the requirements of the Contract Documents unless such changes are specifically denoted, together with justification and are approved in writing by the Owner. All shop drawings and certifications shall be identified by the complete project and job designation numbers, and items or component materials shall be identified by the specific Contract item number and the Specification reference indicated in the Contract Documents.

The Contractor may authorize, in writing, the fabricator to act for him in matters relating to shop drawings and this authorization will have the force and affect of any other representative of his organization.

Shop drawings for steel structures, including metal handrails, shall consist of shop detail, erection and other working plans showing details, dimensions, sizes of members and other information necessary for the complete fabrication and erection of the metal work.

Shop drawings for concrete structures shall provide such details as will be required for the successful prosecution of the work which are not included in the plans furnished by the Owner. These shall include plans for items such as falsework, bracing, centering, form work, masonry, layout diagrams and bending diagrams for reinforcing steel when necessary or when requested.

The Contractor shall submit to the Owner for review five sets of any required shop drawings. Seven sets are required if the submittal involves water, sewer or traffic items. These plans shall be submitted in sufficient time to allow discussion and correction prior to beginning the work they cover. Comments will be returned within 20 working days. If required, a resubmittal or corrected drawings may be necessary. Work shall not be performed nor materials ordered prior to approval of these drawings except at the Contractor's risk. The Contractor will receive one set of approved drawings and the remaining sets continue to be the property of the Owner.

The Contractor shall submit for review prior to fabrication or construction seven copies of each shop drawing and design calculations with a Professional Engineer's certification of design acceptability for all lighting and traffic control device supports, anchor bolts, framing members, panels, and overhead sign structure and signal pole foundations. The design calculation submittal for traffic signal mast arm pole structures shall include completed Supplemental Deflection Sheet(s) with the data for each size and type of structure. The design calculation shall conform to AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals. The certification shall be made by a Professional Engineer (holding a valid license to practice engineering in the Commonwealth of Virginia).

Unless otherwise specified, and prior to the manufacture of reinforced concrete pipe, the Contractor shall furnish to the Owner a certification of the acceptability of the design of such pipe, as determined from a review which shall be made for the Contractor by a Professional Engineer holding a valid license in the Commonwealth of Virginia. Such certification shall cover all design data, supporting calculations and materials. Pipe designs previously certified or approved by the Owner will not require recertification.

It is expressly understood that the review by the Owner of the Contractor's shop drawings relates to the conformance with the Contract Documents. Such review shall not be considered as authorization for any deviation from the Contract Documents unless the deviation is specifically described including explicit supporting justification, nor will such review relieve the Contractor from responsibility for errors in such drawings. In the event shop drawings, detailing change(s) initiated by the Contractor, require more than two resubmissions or revisions, the cost of additional reviews by the Owner or their designated representative will be assessed to the Contractor.

The Contractor shall furnish the Owner with copies of shop drawings as required for construction purposes and upon completion of the work the original tracings, if required shall be supplied to the Owner.

The cost of shop drawings and certifications furnished by the Contractor shall be included in the cost of appropriate bid items.

Contractor's Responsibility:

A. Representation - By his submittal of any shop drawings or certifications, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data, or will do so, and that he has checked and coordinated each item with other applicable approved shop drawings, certifications, and the contract requirements.

B. Deviations - Approval of shop drawings or certifications shall not authorize any deviation from the requirements of the contract documents, unless such deviations are called to the Owner's attention at the time of the submittal, nor shall such approval relieve the Contractor from his responsibility for errors or omissions therein.

C. Prohibitions - No portions of the work requiring a shop drawing, or certification shall be started nor shall any materials be fabricated or installed prior to approval of such item, except at the Contractor's sole risk.

Shop Drawings shall be submitted for, but not limited to, the following items which apply to this project:

A. Water Meters
B. Water Meter Boxes
C. Valve Stem Risers
D. Precast Storm Drainage Structures
E. Storm Drainage Frames, Grates, and Covers
F. Storm Drainage Outfall Structures
G. All Other Castings
H. Traffic Signal Equipment to include controller units, signal heads, loop detector amplifiers, pedestrian push button and signs, hanger assemblies.
I. Street Signs, Sign Post and Fasteners
J. Street Lighting Pole, Luminaire Arm and Equipment
K. Pedestrian Lighting Pole and Equipment
L. Control Panels
M. Electrical and Signal Junction Boxes, Frames and Covers
N. Irrigation System Equipment
O. Benches, Trash Receptacles, Bike Racks and Other Site Furnishings
P. Sanitary Sewer Saddles and Tees
Q. Mortar Connection of Pipe and Manhole
R. Banner and Banner Assemblies
S. Drinking Fountains and Foot Washes
T. Flag Poles and Flags
U. Concrete Pavers
V. Street light, Pedestrian Light and Signal Foundations
W. Parking Meters
X. Concrete Figures
Y. Sign Sheeting and Panel Materials
Z. Illuminated Street Name and Traffic Control Signs
AA. Traffic Signal Poles, Mast Arms, Pedestal Poles to include Anchor Bolts and Fasteners
BB. Pavement Line and Message Markings Material, Pavement Primer, Markers and Epoxy Adhesives
CC. Precast Virginia Power Manholes, Splice Boxes, Handholes
DD. Transformer or Switch Pads
EE. Tapping Sleeves
FF. Sanitary Sewer Mainline and Lateral Cleanouts
GG. Pressure Gages
HH. Restrained Joints
II. Dissimilar Material Pipe Joints

JJ. Vault Boxes
KK. Flexible Couplings
LL. Dimensioned Piping Layout for Flanged Piping

Certifications shall be submitted for, but not limited to, the following items:

A. Ductile Iron Pipe, Fittings, Couplings, and Solid Sleeves
B. Poly Vinyl Chloride (PVC) Pipe and Pipe Products
C. Concrete Pipe
D. Concrete Pipe Jointing Material
E. Seed, Lime, Fertilizer
F. Engineering Fabric
G. Pavement Markings and Adhesives
H. Asphalt Concrete Mix Design
I. Structural Concrete Mix Design
J. Aggregate Stone Base Sieve Analysis
K. Subbase Sieve Analysis
L. Traffic Signal Equipment and Materials, Hangers, Signal Lamps
M. Traffic Signal and Street Lighting Conduit
N. Electrical Conduit, Connectors, Conductor Cables
O. Electrical Service and Grounding System Materials
P. Street Lighting Equipment and Materials
Q. Trees, Shrubs and Landscaping
R. Concrete for Foundations, Collars, Grout at Pole Bases
S. Galvanized and Steel Pipe and Pipe Products
T. Water Valves
U. Water Valve Boxes
V. Fire Hydrants
W. Air Vent/Blow Off Assembly
X. Sanitary Sewer Manholes, Frames, Covers and Steps
Y. Vacuum Valves
Z. Corporation Stops
AA. Meter Valve
BB. Retainer Glands
CC. Mortar Connection of Pipe and Manhole

Method of Measurement - This item is considered incidental to the cost of furnishing and placing materials and will not be measured for payment.

Basis of Payment - All associated cost of implementing contractor quality control shall be included in other pay items.

Any shop drawings or certifications submitted without the Contractor's stamp of approval will not be considered and will be returned to the Contractor for proper resubmission. If any shop drawings or certification shows variations from the requirements of the contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time. Otherwise, the Contractor will not be relieved of the responsibility for executing the work in accordance with the contract even though the shop drawings and/or certifications have been approved.

The Contractor is to stamp each submittal with a stamp matching that below:

CONTRACTOR'S STAMP

(Contractor's Name)

REPRESENTS THAT WE HAVE DETERMINED AND VERIFIED ALL FIELD DIMENSIONS AND MEASUREMENTS. FIELD CONSTRUCTION CRITERIA, MATERIALS, CATALOG NUMBERS, AND SIMILAR DATA, AND THAT WE HAVE CHECKED AND COORDINATED SUCH SUBMITTALS WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.

BY: DATE:

SECTION 105.03 - CONFORMITY WITH CONTRACT DOCUMENTS

It is the intent of the Contract Documents that all materials to be incorporated in the work and all construction work produced will be in close conformity with the specified values or ranges in values set forth for them in the Contract Documents. Less than exact or complete conformity may be tolerated in instances where the Owner has determined that obtaining exact or complete conformity would not be feasible. In this instance, an adjustment may be made to the contract price.

Permissible tolerances for elevation of top of earthwork and the thickness of the several courses of select material, subbases and bases are specified in the various sections of the Contract Documents. When permissible tolerances are exceeded or in the event consistent deviations from plans or abrupt changes in grade occur, even though within the tolerances, the affected areas shall be reconstructed so as to conform to the specified tolerance and provide a smooth riding surface.

When it is not feasible to reconstruct the areas where the permissive tolerances have been exceeded, payment will be made in accordance with the applicable specification for each material placed.

When the plans require the finished surface to tie into any structural item, the elevation of which is fixed, the elevation of the finished surface shall coincide with the elevation of the structural item.

SECTION 105.04 - FURNISHING AND ERECTING PRECAST STRUCTURES

Precast units will be allowed by the Owner for the construction of standard drainage units, sanitary sewer structures, and minor structures. The use of precast box culverts, precast arch and special design precast structures will be considered provided the design for such structures is submitted to the Owner for approval prior to performance of the work. Submittal of designs for precast items included in the Standard Drawings will not be required provided the fabrication is in strict accordance with the Standard Detail.

Requests for approval of a precast design shall include detailed plans and supporting computations; all of which shall have been reviewed and approved by a registered professional engineer having at least 5 years experience in structural design of the type of precast structures or components proposed. The concrete shall have a design minimum strength at 28 days of 4000 psi with 6% (plus or minus 2%), air content. The design of the concrete mix and the method of casting, curing, handling and erection shall also be subject to review by the Owner. Precast units may be shipped after reaching 85% of design strength as determined by control cylinders in accordance with Section 404; however, units shall retain their structural integrity during shipment and shall be subject to inspection at the job site. Approval to use precast units shall not be construed as waiving the size and weight hauling limitations of Section 105.14.

Approval by the Owner for the use of precast units is permissive only, and it shall be the responsibility of the Contractor to ensure that the precast unit, as installed at each specified location, will possess the specified structural, functional, aesthetic and serviceability characteristics of the cast-in-place design. In the event field conditions make the precast unit unsuitable, the Contractor may modify the unit in a manner which will not be detrimental to the structural design,

as approved by the Owner, or shall replace the unit with the originally designed cast-in-place unit at no additional cost to the Owner.

The design of precast box culverts and precast arches shall conform to Section 302, the applicable requirements of the AASHTO Standard Specifications for Highway Bridges and VDOT modifications thereto.

Unless otherwise indicated on the plans, Standard precast drainage units shall conform to the applicable requirements of AASHTO M199 and the following:

A. The chamber section of the unit shall be free of obstructions between the invert of the inlet and the top of the outfall pipe.

B. In the event the grade on the adjacent gutter is less than 1.5 percent, the grade on the invert of the throat section of the inlet shall be at least 1.5 percent. Precast throats having flat inverts will be permitted in sag locations provided the total length of the required throat opening does not exceed 6 feet.

C. The pipe opening in precast units shall be at least 4 inches, but not more than 8 inches larger than the outside diameter of the pipe. Mortar for use in grouting shall conform to Section 218.

D. When precast units are to be located adjacent to the subbase or base course, units with chambers shall be provided with 3-inch diameter weep holes, with hardware cloth, and shall be located to drain the subbase.

E. Precast units located adjacent to cast-in-place concrete items, such as flumes, ditches and gutters, shall be connected to the adjacent units by means of No. 4 smooth steel dowels spaced on approximately 12 inch centers throughout the contact length and extending at least 4 inches into both the precast unit and the cast-in-place item. In the event holes to receive the dowels are provided in the precast unit, they shall not exceed 5/8 inch in diameter. Other methods of providing the connection, such as keyed joints, shall be approved by the Owner prior to fabrication.

F. The chamber section shall be installed in the plumb position. The chamber section and throat section shall have means for positive interlocking action as approved by the Owner. The throat section shall be installed to conform with the normal slope of the finished grade, and may be canted up to a maximum grade of 10% with the resultant void neatly built-up and filled with partial and whole sections of concrete block or brick and mortar. The chamber section and the throat section shall have at least one contact point; however, a maximum of 4 inches high strength grout build-up will be permitted at the contact point to allow for final grade adjustment.

In the event the Contractor elects to furnish and install precast box culverts or precast arches, payment will be made in accordance with Section 302.04 for the original quantities shown on the plans for cast-in-place units and no additional compensation will be allowed for casting, prestressing or shipping of the precast units or for additional work such as waterproofing, epoxy coating or joint sealant required as a result of the substitution.

SECTION 105.05 - COORDINATION OF CONTRACT DOCUMENTS

The Owner will furnish to the Contractor free of charge, five copies of the Project Manual and Project Drawings. The Contractor shall keep one set of the Project Manual and Project Drawings available on the project at all times, except that this will not be required on maintenance, certain sign projects and other projects having no field office or on which the Contractor has no office.

A requirement occurring in any one of the Contract Documents is as binding as though occurring in all. In a case of a discrepancy in the Contract Documents, the following hierarchy will govern: Formal notifications/change orders issued after notice to proceed, addenda issued prior to bid date, project drawings, the project manual and the references therein. In all cases, calculated dimensions, unless obviously incorrect, will govern over scaled dimension.

The Contractor shall take no advantage of any apparent error or omission in the Contract Documents. In the event the Contractor discovers such an error or omission, he shall immediately notify the Owner. The Owner will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Contract Documents.

SECTION 105.06 - COOPERATION OF CONTRACTOR

A. Project Meeting: The Contractor is required to attend meetings as requested by the Owner.

B. Preconstruction Conferences: Preconstruction conferences with the Contractor will be held prior to issuance of a Notice to Proceed.

C. Progress Meetings: A progress meeting to review progress to date and to resolve questions shall be held at a frequency established by the Owner. A meeting agenda will be included with each meeting notification.

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof and shall cooperate with the Owner, and other contractors in every way possible. Where any portion of a project is located within the limits of a military installation or other federally owned property, the Contractor shall cooperate with the appropriate officials in the prosecution of his work to the same extent as with the Owner.

In the Contractor's absence, he shall have on the work at all times as his agent, a competent superintendent capable of reading and thoroughly understanding the Contract Documents and thoroughly experienced in the type of work being performed, who shall receive instructions from the Owner or his authorized representatives. The superintendent shall have full authority to execute orders or directions of the Owner without delay and to promptly supply such materials, equipment, tools, labor, and incidentals as may be required. Such superintendent shall be furnished irrespective of the amount of work sublet.

SECTION 105.07 - COOPERATION WITH REGARD TO UTILITIES

A. Within the limits of this project there maybe underground utilities which cannot be located from existing data. It shall be the responsibility of the Contractor to carry out his work carefully and skillfully so as to avoid damage to any underground utilities. Test pits, where necessary to locate existing underground facilities and performed at the direction of the Owner, will be paid for at the contract unit price per each test pit.

B. All attachments to utility company poles shall be in accordance with the requirements of the utility and subject to the inspection by utility companies owning poles. The Contractor will obtain "permission to attach" or service drops from the appropriate utility company. The Contractor shall provide notice to the utility company at least 21 days prior to need for service.

C. Existing city water and sewer valves may only be opened and closed by or under the direct supervision of the Owner's personnel. When the Contractor requires valve operating services, it shall verbally inform the Public Utilities Inspector and inform the Owner in writing at least 48 hours in advance of the service required. In an emergency situation the Contractor shall act to prevent loss or injury.

D. The cost of all work connected with the maintaining, protecting, and disposing of all utilities affected by the work under this contract shall be included in the respective bid for the related items of the Contract and no other compensation will be allowed.

E. The Contractor shall coordinate his operations with the planned utility adjustments and take all necessary precautions to prevent disturbance to the utility facilities. The Contractor shall report to the Owner any failure on the part of the utility owners to cooperate or proceed with the planned utility adjustments.

F. All utility adjustments or new utility installations included in the Contract Documents to be performed by the Contractor shall be completed in accordance with the Contract provisions. The Contractor shall perform his work in a manner which will cause the least inconvenience to the utility owner or those being served by the utility.

G. Any existing, adjusted or new utility facilities which are to remain within the right-of-way shall be properly protected by the Contractor to prevent disturbance or damage resulting from construction operations. In the event an existing utility is encountered by the Contractor which requires adjustment, the Contractor shall not interfere with said utility, but shall take the proper precautions to protect the facility and promptly notify the Owner.

H. Should the Contractor desire the temporary or permanent adjustment of utilities for his own benefit, he shall conduct all negotiations with the utility owners and pay all costs in connection with such adjustment.

SECTION 105.08 - COOPERATION AMONG CONTRACTORS

The Owner reserves the right at any time to Contract or approve concurrent Contracts for the performance of other work on, near or within the project limits. The Contractor shall not impede or limit access to such work by others.

When separate Contracts are awarded within the limits of one project, each Contractor shall conduct the work with a minimum hindrance to the work being performed by other contractors. Contractors working on the same project shall cooperate with each other and, in case of dispute, the Owner shall be the referee and its decision shall be binding upon all parties.

When Contracts are awarded to separate Contractors for concurrent construction within a common area, the Contractors, in conference with the Owner, shall establish a written joint schedule of operations based on the limitations of the individual contracts and the joining of the work of one contract with the others. The schedule shall set forth the approximate dates and sequences for the several items of work to be performed and will insure completion within the contract time. The schedule shall be submitted to the Owner for review and approval no later than 30 days after the award date and prior to the first estimate. The schedule shall be mutually agreeable, signed by, and binding upon each Contractor. The Owner may allow modifications of the schedule when mutual benefit to the Contractors and the Owner will result. Any modification of the schedule shall be in writing, mutually agreeable, signed by the Contractors, and shall be binding upon the Contractors in the same manner as the original agreement. Should the Contractors fail to agree upon a joint schedule of operations, they shall submit their individual schedules to the Owner who will prepare a schedule which will be binding upon each Contractor.

The joint schedule and any modification thereof shall become a part of each Contract involved and failure of either Contractor to abide by the terms of the joint schedule shall be justification for declaring the Contractor in default of the contract.

Each Contractor shall assume all liability, financial or otherwise, in connection with his Contract and shall protect and save harmless the Owner from any and all damages and claims that may arise because of inconvenience, delay or loss experienced by him as a result of the presence and operations or other contractors working in or near the work covered by his Contract and shall assume all responsibility for any of his work not completed because of the presence and operations of other contractors.

If any part of the Contractor's work depends upon the work of any other contractor for proper execution or results, the Contractor shall inspect and promptly report to the Owner any defects in such work that render it unsuitable for such proper execution and results. The Contractor's failure so to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other contractor's work after the execution of his work. To insure the proper execution of his subsequent work, the Contractor shall measure work already in place and shall at once report in writing to the Owner any discrepancy between the executed work and the contract documents.

The Owner will not assume any responsibility for acts, failures or omissions of one Contractor which delay the work of the other except as provided herein.

SECTION 105.09 - HOLIDAYS

Except as is necessary to maintain traffic, work shall not be performed on Saturdays, Sundays, or the following holidays without the permission of the Owner.

New Year's Day	Labor Day
Martin Luther King, Jr., Day	Veterans Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

If any of these holidays occur on Saturday, the Friday prior to the holiday shall be considered as the holiday. If any of these holidays occur on Sunday, the following Monday shall be considered as the holiday.

SECTION 105.10 - CONSTRUCTION STAKES, LINES AND GRADES

The Owner shall furnish initial surveying consisting of centerline and/or baseline stakes at 500' intervals and at PI, PC and PT points. Bench marks will be set at 1,000' intervals along the project. For pump stations, the Owner will establish the temporary construction benchmark, the property boundaries, and the four corners of the below ground structure. All other staking is the Contractor's responsibility including replacement of initial control due to Contractor's negligence.

SECTION 105.11 - AUTHORITY AND DUTY OF INSPECTOR

The Inspector is the fully authorized representative of the Owner for this project. All communications, between the Contractor and Owner will be through the Inspector. During the prosecution of the work, the Inspector will decide all questions which may arise as to the quantity, quality and acceptability of material furnished and work performed and as to the rate of progress of the work; all questions which may arise as to the acceptable fulfillment of the contract on the part of the Contractor, all disputes and mutual rights between contractors and all questions as to compensation.

The Inspector will have the authority to suspend the work wholly or in part due to the failure of the Contractor to correct conditions unsafe for the workmen or the general public; for failure to carry out provisions of the contract, for failure to carry out orders; for such periods as he may deem necessary due to unsuitable weather; for conditions considered unsuitable for the prosecution of work or for any other condition or reason deemed to be in the public interest.

SECTION 105.12 - INSPECTION OF WORK

Under the phase inspection concept, inspection will be performed at the critical stages, however, all stages, materials and details of the work are subject to inspection. The Owner shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make and complete a detailed inspection. The Owner shall have ready access to machines and plant equipment used in the processing or placement of materials.

Final inspection. The Owner shall schedule a final inspection of the work included in the contract within ten days after receipt of written notification from the Contractor that the work is completed. If the work is not acceptable to the Owner, the Contractor shall be advised as to the particular defects to be remedied before final acceptance can be made.

Failure of the Owner to make this inspection within the time specified in no way relieves the Contractor of any of its obligations under the contract.

Only written notification from the Owner will constitute final acceptance of any part of the work under the contract.

Prior to beginning operations, the Inspector will meet with the Contractor to establish an understanding of the critical stages of work. In order for the Inspector to effectively and efficiently schedule inspection of the work, the Contractor shall furnish the Inspector a progress schedule in accordance with Section 108.08.

If the Inspector 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 Contract Documents. Should the work thus exposed or examined prove acceptable, the uncovering or removing, and the replacing of the covering or making good the parts removed will be

paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering or removing, and the replacing of the covering or making good the parts removed, will be at the Contractor's expense.

If any work is directed to be left open by Inspector is covered before testing and acceptance, contractor will not be paid for cost of uncovering.

When any other unit of government or political subdivision, or any public or private corporation, is to pay a portion of the cost of the work covered by this Contract, its respective representatives shall have the right to inspect the work. The exercise of this right by such unit of government or political subdivision, or public or private corporation, will not be construed as making them a party or parties to the Contract, nor confer upon them the right to issue instructions or orders to the Contractor.

The Owner will provide inspection coverage for the schedule of activities proposed by the Contractor; however, delays to work resulting from failure on the part of the Contractor to provide the schedule of operations in a timely manner, as required in Section 108.08, will not be considered just cause for extension of Contract time nor for additional compensation.

Any work done or materials used without inspection by the Owner may be ordered removed and replaced at the Contractor's expense, unless the Owner failed to inspect after having been given reasonable notice in writing that the work was to be performed.

When an inspection reveals that work has not been properly performed, the Contractor will be so advised and shall immediately inform the Owner of his schedule for correcting such work, as well as the time at which a re-inspection of such work can be made.

The failure of the Owner to reject or condemn improper materials and workmanship shall not prevent the Owner from rejecting materials and workmanship found defective at any time prior to the final acceptance of the completed work, nor shall it be considered as a waiver of any defects which may be discovered later, or as preventing the Owner at any time prior to the expiration of the guarantee period from recovering damages for work actually defective.

If the Contract Documents, Owners instruction, laws, ordinances or any public authority require any work to be specifically tested or approved, the Contractor shall give the Owner timely notice of it's readiness for inspection, and if the inspection is by another authority other than the Owner the date fixed for such inspection.

Work Outside Regular Hours of the Inspector: If the Contractor desires to perform work outside the regular hours of the Inspector, the Contractor shall request permission to work 48 hours in advance to allow arrangements to be made for proper inspection. The Owner may refuse the Contractor permission to work for just cause. Reasonable efforts shall be made by the Contractor to avoid undue noise during the night and on Sundays, if it is necessary to work at such time.

The Owner reserves the right to schedule the Contractor to work outside normal working hours.

SECTION 105.13 - REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK

Work which does not conform to the requirements of the Contract Documents will be considered unacceptable. Unacceptable work shall be remedied or removed immediately and replaced in an acceptable manner at the Contractor's expense.

No work shall be done until the lines and grades have been given by the Owner. Work done contrary to the instructions of the Owner, work done beyond the lines shown on the plans or as given, except as herein specified, or any extra work done without authority will be considered as unauthorized and will not be paid for by the Owner. Unauthorized work may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply forthwith with any order of the Owner made under the provisions of this section, the Owner will have authority to cause unacceptable work to be removed and replaced and unauthorized work to be removed and to deduct the cost from any monies due or to become due to the Contractor.

If the Contractor does not remove nonconforming work and materials within a reasonable time, fixed by written notice from the Owner, the Owner may remove them and may store the materials at the expense of the Contractor. If the Contractor does not pay the expense of such removal and storage within ten days time, the Owner may upon ten days written notice, sell such materials at auction or at private sale and shall account for the net proceeds, after deducting all the costs and expenses that should have been borne by the Contractor.

SECTION 105.14 - SIZE AND WEIGHT LIMITATIONS

A. Hauling or Moving Material and Equipment on Public Roads Open to Traffic: The Contractor shall comply with legal size and weight limitations in the hauling or moving of material and equipment on public roads open to traffic unless the hauling or moving is covered by a hauling permit.

B. Hauling or Moving Material and Equipment on Public Roads Not Open to Traffic: The Contractor shall comply with legal weight limitations in the hauling or moving of material and equipment on public roads that are not open to traffic unless the hauling or moving is permitted elsewhere herein or is otherwise covered by a hauling permit. The Contractor shall be liable for damage that results from the hauling or moving of material and equipment. The hauling or moving of material and equipment on the pavement structure or across any structure during various stages of construction shall be subject to additional restrictions as specified or directed by the Owner.

C. Furnishing Items in Component Parts of Sections: If the size or weight of fabricated or manufactured items together with that of the hauling or moving vehicle exceeds the limitations covered by hauling permit policies and other means of transportation are not available, permission will be given to furnish the items in component parts of sections with adequately designed splices or connections at appropriate points. Permission for such adjustments shall be requested in writing, and approval in writing shall be secured from the Owner prior to fabrication or manufacture of the items. The request shall state the reasons for adjustment and shall be accompanied by supporting data, including working drawings where necessary.

SECTION 105.15 - ACCEPTANCE

A. Partial Acceptance:

1. If at any time during the prosecution of the project the Contractor completes a unit or portion of the project, such as a structure, an interchange, slopes, pavement, or a section of a roadway, in its entirety, he may ask the Owner to make final inspection of such work. If the Owner finds upon inspection that the work conforms to the requirements of the Contract Documents and that acceptance is in the interest of the public, the Owner may accept the work as being completed, and the Contractor will be relieved of further responsibility for the work as specified in Section 107.16. Partial acceptance shall in no way void or alter any terms of the Contract.

2. The Owner shall have the right to take possession of and use any completed or partially completed portions of the work. If such prior use increases the cost of or delays the work, the Contractor shall be entitled to such extra compensation or extension of time or both as the Owner and the Contractor may agree.

3. If any damage attributable to causes beyond the control of the Contractor is sustained by the accepted unit or portion of the project, the Owner may authorize the Contractor to make necessary repairs. In the absence of contract prices covering the items of repair, the work will be paid for in accordance with Section 109.05.

B. Final Acceptance: Upon receipt of a written notice from the Contractor of presumptive completion of the entire project, the Owner will make an inspection. If all work specified in the Contract Documents has been completed, the inspection will constitute the final inspection and the Owner will make the final acceptance. The Contractor will be notified of final acceptance in writing within five days.

If the inspection discloses that any work, in whole or in part, is incomplete or unacceptable, the Contractor shall immediately correct the deficiency. Upon completion or correction of the work, another inspection will be made that will constitute the final inspection. In such event, the Owner will make the final acceptance and the Contractor will be notified of final acceptance in writing within five days. In any event, the Contractor shall maintain the project until final acceptance except under conditions that may be specifically exempted.

SECTION 106 - CONTROL OF MATERIAL

SECTION 106.01 - SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

All materials used throughout the work shall conform to the requirements of the Contract Documents. The Contractor shall regulate his supplies so that there will be a sufficient quantity of tested material on hand at all times to prevent any delay of work. Except as otherwise specified, materials, equipment, and components shall be new. No later than seven days prior to beginning construction operations under the Contract, the Contractor shall file a statement of the origin, composition, and manufacture of all materials to be used in the work, including optional or alternate items. The Contractor's statement shall be identified by the complete project number, and all items or component materials shall be identified by the specific contract item number and the specification reference shown in the Contract Documents.

When Contract Documents require that installation of material shall comply with the manufacturer's printed instructions, obtain and distribute copies of such instructions to the parties involved in the installation at the same time as shop drawings. Maintain one set of complete instructions at the job site during installation and until completion.

SECTION 106.02 - MATERIAL INSPECTION

The Contractor shall advise the Owner at least two weeks prior to the delivery of any material from a commercial source. The Contractor shall provide the Owner with one copy of all invoices (prices are not required) for materials delivered to the project with the following exceptions: asphalt concrete; dense graded aggregate, to include aggregate base, subbase, and select material; fine aggregate; open graded coarse aggregate; crusher run aggregate; and road stabilization aggregate. The printed weights of each load of these materials, as specified in Section 109.01, shall accompany the delivery, and such information shall be made available to the Inspector at the project.

The Contractor will be responsible for supplying to the Owner certificates of supply for all materials used on this project. If a material, i.e. concrete, is made up of more than one material, then a certificate must be furnished for each constituent. The certificate must state the supplier's name, source of supply and verify that if applicable, the product meets the standards of the Contract Documents. The certificate must be signed by the supplier and the Contractor. Certificates must be presented to the Owner and approved prior to the use of the material on the project. The Owner reserves the right to perform tests on the materials used at any time.

The Owner will inspect the materials provided under the contract. The Contractor shall give the Owner timely notice of its readiness for inspection and testing. If any work should be covered up without approval or consent of the Owner, the Owner may require it be uncovered for examination.

The failure of the inspector to reject or condemn materials and workmanship not conforming to the Contract Documents shall not prevent the Owner from rejecting materials and workmanship found not to be in accordance with the Contract Documents at any time prior to the acceptance of the completed work, nor shall it be considered as a waiver of any nonconformance with the Contract Documents which may be discovered later, or as preventing the Owner at any time prior to the expiration of the guarantee period from recovering damages for work not in accordance with the Contract Documents.

SECTION 106.03 - LOCAL MATERIAL SOURCES (PITS AND QUARRIES)

The Contractor shall conform to all federal, state and local laws, ordinances, etc., governing the use of pits and quarries.

SECTION 106.04 - DISPOSAL AREAS

In the performance of the work of this Contract, unsuitable materials, surplus materials or other construction debris, not designated by the Owner for replacement within the project limits, shall be deposited on a site located outside the project limits in compliance with this Contract, and federal, state and local laws and regulations. The Contractor shall obtain the necessary rights to the disposal site or sites utilized.

The Contractor shall furnish the Owner a statement signed by such disposal site property owner agreeing to the use of the property for the deposit of material from the project. Upon completion of the use of the property as a disposal area, the Contractor shall also furnish the Owner a release signed by the disposal site property owner indicating that the property is in satisfactory condition.

Design, use, maintenance and restoration of the disposal site, along with the transportation of any materials, shall be in accordance with the terms of this Contract, any Contractor's agreement with the disposal site property owner, federal, state and local laws and regulations. Additionally, the Contractor shall obtain all federal, state and local approvals and permits before beginning any disposal operations. The approvals and permits shall be available for review by the Owner upon request. Whenever practicable, the Contractor should utilize disposal areas which are already approved and permitted for the disposal of unsuitable and /or surplus material.

Failure to comply with this provision will constitute a material breach of this Contract which will entitle the Owner to any and all remedies available pursuant to this Contract and under the law including, but not limited to, actual damages, penalties, fines, removal, restoration, attorney fees, and legal expenses.

SECTION 106.05 - RIGHTS TO AND USE OF MATERIALS FOUND WITHIN PROJECT LIMITS

With the approval of the Owner, the Contractor may use in the project any materials found in the excavation that comply with the specifications. Unless otherwise specified, the Contractor will be paid for both the excavation of such materials at the contract unit price and for the pay item for which the excavated materials is used. However, the Contractor shall replace at his own expense with other acceptable material the excavation material removed and used that is needed for use in embankments, backfills, approaches, or otherwise. The Contractor shall not excavate or remove any material from within the project limits that is not within the grading limits, as indicated by the slope and grade lines, without authorization by the Owner.

SECTION 106.06 - SAMPLES, TESTS, AND CITED SPECIFICATIONS

Materials will be inspected and may be tested by the Owner before or during incorporation in the work. However, the inspection and testing of such material shall not relieve the Contractor of the responsibility for furnishing material that conforms to the specifications. The Owner may retest all materials that have been accepted at the source of supply after delivery and may reject those that do not conform to the specifications. Stored material may be re-inspected prior to use. Work in which untested materials are used without the written permission of the Owner may be considered unacceptable.

Unless reference is made to a specific dated specification, references in these specifications to AASHTO, ASTM, VTM, and other standard test methods and materials requirements shall refer to either the test specifications that have been formally adopted or the latest "interim" or "tentative" specifications that have been published by the appropriate committee of such organizations as of the date of advertisement for bids.

The inspection cost of structural steel items fabricated in a country other than the continental United States shall be borne by the Contractor. Inspection of structural fabrication shall be preformed in accordance with the appropriate VTM by a commercial laboratory approved by the Owner. Additional cleaning or repair necessary because of environmental conditions in transit shall be at the Contractor's expense.

In lieu of testing, the Owner may approve the use of materials based on the receipt of a certification furnished by the Contractor from the manufacturer. However, furnishing the certificate shall not relieve the Contractor of the responsibility for furnishing materials that conform to the specifications.

SECTION 106.07 - PLANT INSPECTION

If the Owner inspects materials at the source, the following conditions shall be met:

A. The Owner shall have the cooperation and assistance of the Contractor and producer of the materials.

B. The Owner shall have full access to parts of the plant that concern the manufacture or production of the materials being furnished.

C. Adequate safety measures shall be provided and maintained.

SECTION 106.08 - STORING MATERIALS

Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.

Immediately on delivery, Contractor shall inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that products are properly protected and undamaged.

Materials shall be stored in a manner so as to ensure the preservation of their quality and fitness for the work. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. When considered necessary by the Owner, materials shall be stored in weatherproof buildings on wooden platforms or other hard, clean surfaces that will keep the material off the ground. Materials shall be covered when directed by the Owner. Stored material shall be located so as to facilitate its prompt inspection. Approved portions of the right of way may be used for storage of material and equipment and for plant operations. However, equipment and materials shall not be stored within the clear zone of the travel lanes open to traffic.

If needed, additional required storage space shall be provided by the Contractor at his expense. Private property shall not be used for storage purpose without the written permission of the private property owner or lessee. Copies of the written permission shall be furnished to the Owner. Upon completion of the use of the property, the Contractor shall furnish the Owner a release signed by the private property owner indicating that the property has been satisfactorily restored.

SECTION 106.09 - HANDLING MATERIALS

Materials shall be handled in a manner that will preserve their quality and fitness for the work. Aggregates shall be transported from storage to the work in vehicles constructed to prevent loss or segregation of materials.

Provide equipment and personnel to handle products by methods to prevent soiling or damage to products or packaging.

SECTION 106.10 - UNACCEPTABLE MATERIALS

Materials that do not conform to the specifications shall be considered unacceptable. Such materials, whether in place or not, will be rejected and shall be removed from the site of the work. If it is not practical for the Contractor to remove rejected material immediately, the Owner will mark the material for identification. Rejected material whose defects have been corrected shall not be used until approval has been given by the Owner.

SECTION 106.11 - MATERIAL FURNISHED BY THE OWNER

The Contractor shall furnish all materials required to complete the work except those specified to be furnished by the Owner.

Material furnished by the Owner will be delivered or made available to the Contractor at the points specified in the Contract Documents. The cost of handling and placing materials after delivery to the Contractor shall be included in the contract price for the item with which they are used.

The Contractor shall be responsible for material delivered to him, including shortages, deficiencies, and damages that occur after delivery, and any demurrage charges.

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

SECTION 107.01 - LAWS TO BE OBSERVED

The Contractor shall keep fully informed of federal, state, and local laws, bylaws, ordinances, orders, decrees, and regulations of governing bodies, courts, and agencies having any jurisdiction or authority that affects those engaged or employed on the work, the conduct of the work, or the execution of any documents in connection with the work. The Contractor shall observe and comply with such laws, ordinances, regulations, orders, or decrees and shall indemnify and hold harmless the Owner and its agents, officers, or employees against any claim for liability arising from or based on their violation, whether by himself, his agents, his employees, or subcontractors. If the Contractor observes that the contract documents are at variance therewith, he shall promptly notify the Owner in writing. The Contractor shall execute and file the documents, statements, and affidavits required under any applicable federal or state law or regulation affecting his bid or Contract or prosecution of the work thereunder. The Contractor shall permit examination of any records made subject to such examination by any federal or state law or by regulations promulgated thereunder by any state or federal agency charged with enforcement of such law.

SECTION 107.02 - PERMITS, CERTIFICATES, AND LICENSES OBTAINED

Permits and certificates obtained by the Owner will be included in the Contract Documents. Construction methods shall conform to the stipulations of the permit. The Contractor shall assume all obligations and cost it incurs by complying with the terms and conditions of the permits and certificates.

A. If a U.S. Army Corps of Engineers permit is not applicable and additional permits or certificates are required to perform dredging for flotation of construction equipment or for other temporary work as indicated in the Contractor's accepted plan of operations but have not been obtained by the Owner, the Contractor shall furnish the Owner, at least 75 days prior to the proposed activity, all necessary information pertaining to the proposed activity in order for the Owner to make application for the permit(s) or certificate(s). The Contractor shall not begin the proposed activity until the additional permit(s) or certificate(s) has been secured and the Contractor has been advised by the Owner that the proposed activity may proceed. Additional compensation will not be made for delay(s) to the work or for change(s) in the Contractor's proposed methods that may result from the jurisdictional agencies' review process or disapproval of the Contractor's proposed methods except that an extension of time will be considered in accordance with Section 108.09 if a permit or permit denial is not issued within the specified 75 days.

B. **Permits**: The Contractor shall procure all necessary permits for this project. The Contractor shall pay all charges, fees, and taxes and give all notices necessary and incidental to the due and lawful prosecution of the work.

C. Other Certificates, and Licenses: Except as otherwise specified herein, the Contractor shall procure all certificates, or licenses for this project. The Contractor shall pay all charges, fees, and taxes and give all notices necessary and incidental to the due and lawful prosecution of the work.

SECTION 107.03 - PATENTED DEVICES, MATERIALS, AND PROCESSES

If the Contractor employs any design, device, material, or process covered by a patent or copyright, he shall provide for its use by obtaining a legal agreement with the patentee or Owner. The Contractor and the surety shall indemnify and save harmless the Owner, any affected third party, or political subdivision from claims for infringement because of such use. The Contractor shall indemnify the Owner for costs, expenses, or damages resulting from infringement during prosecution or after completion of the work.

SECTION 107.04 - RESTORATION OF WORK PERFORMED BY OTHERS

The Owner may construct or reconstruct any utility service in the highway or street or grant a permit for the same at any time. The Contractor shall not be entitled to any damages occasioned thereby other than a consideration of an extension of time.

When authorized by the Owner, the Contractor shall allow any person, firm, or corporation to make an opening within the limits of the project upon presentation of a duly executed permit from the Owner. When directed by the Owner, the Contractor shall satisfactorily repair portions of the work disturbed by the openings. The necessary work will be paid for as extra work in accordance with these specifications and shall be subject to the same conditions as the original work performed.

SECTION 107.05 - FEDERAL-AID PROVISIONS

When the U.S. government pays all or any portion of the cost of a project, the Contractor shall observe the federal laws and rules and regulations made pursuant to such laws. The work shall be subject to inspection by the appropriate federal agency. Such inspection shall in no sense make the federal governments a party of the Contract and will in no way interfere with the rights of either party.

SECTION 107.06 - SANITARY PROVISIONS

The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of employees as may be necessary to comply with the requirements of the state and local Board of Health or other bodies or tribunals having jurisdiction.

SECTION 107.07 - PUBLIC CONVENIENCE AND SAFETY

The Contractor shall conduct his work so as to ensure the least possible obstruction to traffic. The Contractor shall provide for the safety and convenience of the general public and residents within the project limits and the protection of persons and property as specified in Section 104.04.

SECTION 107.08 - RAILWAY-HIGHWAY PROVISIONS

N/A

SECTION 107.09 - CONSTRUCTION OVER OR ADJACENT TO NAVIGABLE WATERS

The Contractor shall conduct the work on navigable waters so as to ensure the least possible obstruction to navigation and that the existing navigable depths will not be impaired except as may be allowed by a permit issued by the U.S. Coast Guard. The Contractor shall also provide and maintain temporary navigation lights and signals required by U.S. Coast Guard regulations for the protection of navigation. When the Owner determines that the work has reached a point where such action may be taken, the channel(s) through the structure shall be promptly cleared of falsework, piling, or other obstructions placed therein or caused by the construction of the structure to the satisfaction of the Coast Guard.

SECTION 107.10 - BARRICADES AND WARNING SIGNS

The Contractor shall provide and maintain all necessary watchmen, barricades, lights and warning signs, and take all necessary precautions for the protection and safety of the public.

SECTION 107.11 - USE OF EXPLOSIVES

The use of explosives will not be allowed.

SECTION 107.12 - PROTECTING AND RESTORING PROPERTY AND LANDSCAPE

Protection of work and property. In an emergency affecting the safety of life, the work, or of the adjoining property, the Contractor, without special instruction or authorization from the Owner, shall act to prevent threatened loss or injury. Any compensation, claimed by the Contractor on account of emergency work, shall be determined by agreement.

Cleaning up and restoration of site. The Contractor shall, during the progress of the work and as directed by the Owner, remove from the Owner's property and from all public and private property and rights-of-way, at its own expense, all temporary structures, rubbish, debris, piles of earth, foreign matter, and waste materials resulting from his operations. The site of the work shall be restored to the conditions existing before the work was started, to the satisfaction of the Owner. Lawns, pavements, sidewalks, and other surfaces shall be preserved where practicable, but if damaged, shall be fully restored.

The Owner may take corrective action if the Contractor fails to perform cleanup and restoration in an orderly, continuous, and expeditious manner, the Owner may take corrective action three days after delivery of notice to do so to the Contractor and deduct the cost from any monies due the contractor.

The Contractor shall preserve property and improvements along the lines of and adjacent to the work unless their removal or destruction is called for by the plans. The Contractor shall use suitable precautions to prevent damage to such property.

When the Contractor finds it necessary to enter on private property, he shall secure from the property owner or lessee a written permit for such entry prior to moving thereon. An executed copy of this permit shall be furnished to the Owner.

The Contractor shall be responsible for damage or injury to property during the prosecution of the work resulting from any act, omission, neglect, or misconduct in the method of executing the work or attributable to defective work or materials. This responsibility shall not be released until final acceptance of the project.

When direct or indirect damage is done to property by or on account of any act, omission, neglect, or misconduct in the method of executing the work or in consequence of the non-execution thereof on the part of the Contractor, the Contractor shall restore such property to a condition similar or equal to that existing before such damage was done by repairing, rebuilding, or restoring, as may be directed by the Owner, or making settlement with the property owner. The Contractor shall secure from the property owner a release from any claim against the Owner without additional compensation therefore. A copy of this release shall be furnished to the Owner.

SECTION 107.13 - RESPONSIBILITY FOR DAMAGE CLAIMS
N/A

SECTION 107.14 - ENVIRONMENTAL STIPULATIONS

No separate payment will be made for the work or precautions described herein except where provided for as a specific item in the Contract or except where provision has been made for such payment in these specifications.

A. Pollution

1. Water - The Contractor shall exercise every reasonable precaution throughout the duration of the project to prevent pollution of rivers, streams, and impoundments. Pollutants such as chemicals, fuels, lubricants, bitumens, raw sewage, paints, sedimentation, and other harmful material shall not be discharged into or alongside rivers, streams, or impoundments or into channels leading to them.

   Construction discharge water shall be filtered to remove deleterious materials prior to discharge into state waters. During specified spawning seasons, discharges and construction activities in spawning areas of state waters shall be restricted so as not to disturb or inhibit aquatic species that are indigenous to the waters. Neither water nor other effluence shall be discharged onto wetlands or breeding or nesting areas of migratory waterfowl. When used extensively in wetlands, heavy equipment shall be placed on mats. Temporary construction fills and mats in wetlands and flood plains shall be constructed of approved non-erodible materials and shall be removed by the Contractor to natural ground when the Owner so directs.

   If the Contractor dumps, discharges, or spills any oil, raw sewage or chemical that reaches or has the potential to reach a waterway, he shall immediately notify all appropriate jurisdictional state and federal agencies in accordance with Section 107.01 and shall take immediate actions to contain, remove, and properly dispose of the oil or chemical.

   Excavation material shall be disposed of in approved areas above the mean high water mark shown on the plans in a manner that will prevent the return of solid or suspended materials to state waters. If the mark is not shown on the plans, the mean high water mark shall be considered the elevation of the top of stream banks.

Constructing new bridge(s) and dismantling and removing existing bridge(s) shall be accomplished in a manner that will prevent the dumping or discharge of construction or disposable materials into rivers, streams, or impoundments.

Construction operations in rivers, streams, or impoundments shall be restricted to those areas where channel changes are shown on the plans and to those that must be entered for the construction of structures. Rivers, streams, and impoundments shall be cleared of falsework, piling, debris, or other obstructions placed therein or caused by construction operations.

The Contractor shall prevent stream constriction that would reduce stream flows below the minimum, as defined by the Virginia Department of Environmental Quality (DEQ), during construction operations.

If it is necessary to relocate an existing stream or drainage facility temporarily to facilitate construction, the Contractor shall design and provide temporary channels or culverts of adequate size to carry the normal flow of the stream or drainage facility. The Contractor shall submit a temporary relocation design to the Owner for review and acceptance in sufficient time to allow for discussion and correction prior to beginning the work the design covers. Costs for the temporary relocation of the stream or drainage facility shall be included in the contract price for the related pipe or box culvert.

Temporary bridges or other structures shall be used wherever an appreciable number of stream crossings will be made.

2. Air - The Contractor shall comply with the provisions of Section 107.01 and the State Air Pollution Control Law and Rules of the DEQ, including notifications required therein.

   Burning shall be performed in accordance with applicable local laws and ordinances and under the constant surveillance of watch persons. Care shall be taken so that the burning of materials does not destroy or damage property or cause excessive air pollution. The Contractor shall not burn rubber tires, asphalt, used crankcase oil, or other materials that produce dense smoke. Burning shall not be initiated when atmospheric conditions are such that smoke will create a hazard to the motoring public or airport operations. Provisions shall be made for flagging vehicular traffic if visibility is obstructed or impaired by smoke. At no time shall a fire be left unattended.

   Asphalt mixing plants shall be designed, equipped, and operated so that the amount and quality of air pollutants emitted will conform to the rules of the DEQ.

   Emission standards for asbestos incorporated in the EPA's National Emission Standards for Hazardous Air Pollutants apply to the demolition or renovation of any institutional, commercial, or industrial building, structure, facility, installation, or portion thereof that contains friable asbestos.

3. Noise - The Owner may prohibit or restrict to certain portions of the project any work that produces objectionable noise between 10 P.M. and 6 A.M. If other hours are established by local ordinance, the local ordinance shall govern.

   Equipment shall in no way be altered so as to result in noise levels that are greater than those produced by the original equipment.

   When feasible, the Contractor shall establish haul routes that direct his vehicles away from developed areas and ensure that noise from hauling operations is kept to a minimum.

   These requirements are not applicable if the noise produced by sources other than the Contractor's operation at the point of reception is greater than the noise from the Contractor's operation at the same point.

   a. Stationary Noise

Noise produced by stationary, engine driven, continuously operating construction equipment shall be kept at a maximum level of 60 dba at a distance of 50 feet.

The equipment to be furnished for noise control shall include one portable sound reducing enclosure for each unit of stationary, engine driven, continuously operating equipment on the project.

1. The enclosure shall have a roof and be enclosed on all sides. The enclosure shall be sized such that there is a minimum of 3 feet of clear space on all sides of the equipment. The base of the enclosure shall rest solidly on the ground for its entire perimeter. Openings shall be provided for ventilation and piping shall be baffled.

2. Under no circumstances are fuel tanks or drums to be housed within the enclosure.

3. Should the enclosure be locked after working hours, the Owner is to be provided a key for use during emergency operations.

4. The total area of ventilation openings shall be based on a minimum air quantity of 5,000 cfm and a maximum velocity of 500 fpm.

5. The exhaust system, complete with muffler, shall be maintained in a leak free condition, free of holes and loose fittings. The muffler shall be maintained to produce the noise reduction qualities of a new muffler throughout the project. The exhaust system shall be extended through the roof of the enclosure; under no circumstances shall the equipment exhaust within the enclosure.

6. Sound absorbing material shall be a minimum of 32-inch nonflammable insulation, vapor barrier away from equipment, or equal.

7. Suction and discharge piping shall be extended through the sides of the enclosure and the annular space around the pipe shall be filled with a flexible, nonflammable material.

b. Non-Stationary Noise

1. The Contractor's operations shall be performed so that non-stationary noise levels measured during a noise-sensitive operation shall not be more than 80 decibels within 100 feet from the point of origin or within 10 feet of a facility. Noise-sensitive facility is any facility for which lowered noise levels are essential if the facility is to serve its intended purpose. Such facilities include, but are not limited to, those associated with residences, hospitals, nursing homes, churches, schools, libraries, parks and recreational areas.

2. The Owner may monitor construction-related noise. If construction noise levels exceed 80 decibels, the Contractor shall take corrective action before proceeding with operations. The Contractor shall be responsible for costs associated with the abatement of construction noise and the delay of operations attributable to noncompliance with these requirements.

C. Forest

The Contractor shall take all reasonable precautions to prevent and suppress forest fires in any area involved in construction operations or occupied by him as a result of such operations. The Contractor shall cooperate with the proper authorities of the state and federal governments in reporting, preventing, and suppressing forest fires. Labor, tools, or equipment furnished by the Contractor upon the order of any forest official issued under

authority granted the official by law shall not be considered a part of the Contract. The Contractor shall negotiate with the proper forest official for compensation for such labor, tools, or equipment.

D. Archeological, Paleontological, and Rare Mineralogical Findings

In the event of the discovery of prehistoric ruins, Indian or early settler sites, burial grounds, relics, fossils, meteorites, or other articles of archeological, paleontological, or rare mineralogical interest during the prosecution of work, the Contractor shall act immediately to suspend work at the site of the discovery and notify the Owner. The Owner will immediately notify the proper state authority charged with the responsibility of investigating and evaluating such finds. The Contractor shall cooperate and, upon request by the Owner, assist in protecting, mapping, and removing the findings. Labor, tools, or equipment furnished by the Contractor for such work will be paid for in accordance with Section 104.03. Findings shall become the property of the Owner unless they are located on federal lands, in which event they shall become the property of the U.S. government.

When such work delays the progress of the work, the Owner will give consideration to adjustments in the contract time limit in accordance with Section 108.09.

SECTION 107.15 - OPENING SECTIONS OF PROJECTS TO TRAFFIC

When specified in the Contract or when directed by the Owner, certain sections of the work may be opened to traffic.

On any section of the work opened by order of the Owner where the Contract Documents do not provide for traffic to be carried through the work and the Contractor has not been dilatory in prosecuting the work, the Contractor will not be required to assume any expense entailed in maintaining the road for traffic. Such expense will be borne by the Owner or will be compensated for in accordance with Section 109.05. Repair of slides and repair of damage attributable to traffic will be compensated for in accordance with Section 109.05. The cost of all other repairs shall be borne by the Contractor. Slides shall be removed by the Contractor in accordance with Section 303.

On any section of the work opened by the order of the Owner where the Contract Documents do not provide for traffic to be carried through the work, any additional cost for the completion of other items of work that are occasioned because of the changed working conditions will be compensated in accordance with Section 109.05.

If the Contractor is dilatory in completing the work, he shall not be relieved of the responsibility for maintenance during the period the section is opened to traffic prior to final acceptance. Any expense resulting from the opening of such portions under these circumstances, except for slides, shall be borne by the Contractor. The Contractor shall conduct the remainder of the construction operations so as to cause the least obstruction to traffic.

SECTION 107.16 - CONTRACTOR'S RESPONSIBILITY FOR WORK

Until final acceptance of the work by the Owner in accordance with Section 105.15, the Contractor shall have charge and care thereof and shall take every precaution against damage to any part thereof by action of the elements or from any other cause. The Contractor shall rebuild, repair, restore, and make good damage to any portion of the work occasioned by any of the foregoing causes before final acceptance and shall bear the expense thereof. The Owner may reimburse the Contractor for repair of damage to work attributable to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor.

In case of suspension of work, the Contractor shall be responsible for the project and shall take such precautions as may be necessary to prevent damage to the work, provide for erosion control and drainage, and erect any necessary temporary structures, signs, or other facilities at his own expense. During the suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seedings, and soddings furnished under the Contract and shall take adequate precautions to protect new tree growth and other important vegetation against damage.

SECTION 107.17 - CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES

At points where the Contractor's operations are adjacent to the properties of any utility, including railroads, and damage to which might result in considerable expense, loss, or inconvenience, work shall not commence until arrangements necessary for the protection thereof have been completed.

The Contractor shall cooperate with owners of utility lines so that removal and adjustment operations may progress in a reasonable manner, duplication of adjustment work may be reduced to a minimum, and services rendered by those parties will not be unnecessarily interrupted.

If any utility service is interrupted as a result of accidental breakage or of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the authority in the restoration of service. If utility service is interrupted, repair work shall be continuous until service is restored. The Contractor shall be responsible for any damage to utilities that is attributable to his neglect or methods of performing the work.

Nothing in this section shall be construed to be in conflict with Section 107.12.

SECTION 107.18 - FURNISHING RIGHT OF WAY

The Owner may secure necessary rights of way and easements in advance of construction. Easements for temporary uses and detours requested by the Contractor and approved by the Owner in lieu of a detour within the right of way or easement area shall be acquired by the Contractor without the Owner being a party to the agreement.

See Supplemental Specification for status of right-of-way acquisition.

SECTION 107.19 - PERSONAL LIABILITY OF PUBLIC OFFICIALS

In carrying out any of the provisions of these specifications or in exercising any power or authority granted to them by or within the scope of the Contract, there shall be no liability upon the Owner, or its authorized representatives, either personally or as officials of the Owner. In all such matters, they act solely as agents and representatives of the Owner.

SECTION 107.20 - NO WAIVER OF LEGAL RIGHTS

The Owner shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after final acceptance of the work and payment therefore from showing (1) the true amount and character of the work performed and materials furnished by the Contractor, (2) that any such measurement, estimate, or certificate is untrue or incorrectly made, or (3) that the work or materials do not conform with the provisions of the Contract. The Owner shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate, and payment in accordance therewith, from recovering from the Contractor or his surety, or both, such damage as it may sustain by reason of his failure to comply with the terms of the Contract. Neither the acceptance by the Owner or any representative of the Owner, nor any payment for or acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the Owner shall operate as a waiver of any portion of the Contract or of any power herein reserved or of any right to damages. A waiver of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach.

SECTION 107.21 - NOTIFYING THE PUBLIC

Immediately after the Contract is awarded, the Contractor shall obtain from the Office of Real Estate, a list of property owners and businesses located in the immediate area of the project and notify each by mail of impending construction. This notification shall be accomplished prior to beginning any work and will include the approximate date that construction will begin and the length of time in which it will occur. Unless otherwise noted on project drawings, this section will not apply to projects administered by the Department of Public Utilities as shown by the Bid Number.

The Contractor may elect or the Owner may request that a neighborhood meeting be held at a convenient location where the Contractor will review his construction process and dates of major events and will identify a contact person or persons to resolve problems.

SECTION 108 - PROSECUTION AND PROGRESS OF WORK

SECTION 108.01 - SUBCONTRACTING

Except for pump stations or as otherwise noted herein, contract work, the cost of which is at least 30 percent of the total contract amount, shall be performed by the Contractor's own organization.

SECTION 108.02 - NOTICE TO PROCEED

The Owner will issue a Notice to Proceed after execution of the Contract. The contract time will start on the date specified in the Notice to Proceed. In no case shall work begin before the Contract is executed by the Owner. The Contractor shall notify the Owner at least three days prior to the date on which work will begin.

SECTION 108.03 - PROSECUTION OF WORK

Work shall be conducted in such a manner and with sufficient materials, equipment, tools, and labor as are necessary to ensure its completion in accordance with the contract documents. Once the Contractor has begun work, it shall be prosecuted continuously and to the fullest extent possible except for interruptions caused by weather or delays authorized or ordered by the Owner. If approval is given to discontinue the work temporarily, the Contractor shall notify the Owner at least 24 hours in advance of resuming operations.

SECTION 108.04 - CRITICAL MATERIALS

When the supply of critical materials becomes scarce because of the needs of national defense or industrial conditions beyond the control of the Owner or Contractor, the provisions of this section will become applicable to the Contract.

When all items of work involving non-critical materials have been completed by the Contractor or have progressed to a point where no further work is practicable prior to receipt of critical materials, a complete suspension of work will be granted by the Owner. Requests for partial suspension orders because of delays attributable to non-receipt of critical materials will be considered on the basis of merit in each case.

The Owner reserves the right to substitute materials by means of a change order.

SECTION 108.05 - LIMITATION OF OPERATIONS

The Contractor shall conduct the work in a manner and sequence that will ensure its expeditious completion with the least interference to traffic and shall have due regard for the location of detours and provisions for handling traffic. The Contractor shall not open any work to the prejudice or detriment of work already started. The Owner may require the Contractor to finish a section of work before work is started on any other section.

Phases of construction which involve the temporary interruption of essential public utilities shall be scheduled in consultation with the Owner.

SECTION 108.06 - GRATUITIES

Gifts, gratuities, or favors shall not be given or offered by the Contractor to personnel of the Owner.

The Contractor shall not employ any personnel of the Owner for any services without the prior written consent of the Owner.

SECTION 108.07 - CHARACTER OF WORKERS, WORK METHODS, AND EQUIPMENT

Workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special or skilled work shall have sufficient experience in such work and in the operation of equipment required to perform it properly and satisfactorily.

Any person employed by the Contractor or any subcontractor who, in the opinion of the Owner, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Owner, be removed forthwith by the Contractor or subcontractor employing the person and shall not be employed again on any portion of the work without the approval of the Owner.

Equipment shall be of sufficient size and in such mechanical condition as to meet the requirements of the work and produce a satisfactory quality of work. Equipment shall be such that no damage to the roadway, adjacent property, or other highways will result from its use. The Owner may order the removal and require replacement of unsatisfactory equipment.

SECTION 108.08 - PROGRESS SCHEDULE

The Contractor shall submit a progress schedule, no later than 30 days after the award date, satisfactory to the Owner that shows the proposed order of work and indicates the time required to complete the items of work. Work shall begin at the manhole with the lowest invert elevation for sewer projects and at the largest existing main for water projects.

The Contractor shall furnish a schedule showing how he proposes to execute the work to complete the project by the date set for completion. For projects with a construction cost under one million dollars, the schedule shall be either a bar-graph schedule conforming to the requirements of 108.08(a) or a network schedule conforming to the requirements of 108.08(b). For projects with a construction cost over one million dollars, the schedule shall be restricted to a network schedule conforming to the requirements of 108.08(b).

The schedule may be used as the basis for establishing major construction operations and as a check on the progress of the work. The schedule shall, however, be subject to revision in accordance with Section 105.08. Payment for material stockpiled or stored in accordance with Section 109.08 will not be considered in determining the Contractor's rate of progress.

The Contractor shall furnish a schedule showing how he proposes to execute the work to complete the project by the date set for completion using either a bar-graph schedule conforming to the requirements of 108.08(a) or a network schedule conforming to the requirements of 108.08(b).

A. Bar-graph Schedule:

When the Contractor uses the bar-graph type of schedule, the Contractor shall submit, at the pre-construction conference, three copies of the progress schedule.

The progress schedule shall be submitted with the following minimum information included:

Major components of work:

1. Grading
2. Drainage
3. Utilities
4. Base
5. Surface
6. Traffic Signalization and Pavement Marking
7. Miscellaneous Items

The schedule shall include a bar-graph for each line item under each major component of work, showing graphically the calendar time each line item activity is scheduled. The percent complete for each line item activity for each month, based on the monetary value of the work, shall be listed in numbers above the bar-graph.

Upon approval, this schedule shall not be altered without the consent of the Owner. In the event of a major change in scope (Change Order), a time extension, or the Contractor's failure to comply with the approved schedule, the Contractor shall submit a revised progress schedule showing how he proposes to execute the balance of the work, prior to the next payment.

B. Network Schedule:

When the Contractor uses the network scheduling approach, the work shall be scheduled by the Critical Path Method (CPM).

The Contractor shall take into consideration all conditions facing him in carrying out the work, and shall schedule the work to complete it by the required completion date.

Network diagrams shall be prepared on paper not exceeding 24 inches in width and no more than 36 inches in length. Diagrams shall show the order and interdependence of line item activities, and the sequence and quantities in which the work is to be accomplished as planned by the Contractor. The tabulated data shall include early, late, scheduled start and completion. The critical path shall be highlighted on the network.

The Contractor shall submit for approval three copies of a preliminary plan and schedule of contract operations, using network diagrams, at the pre-construction conference. The network will be reviewed by the Owner for logic and conformance to the requirements as set forth herein, and for the conformance to any special notations in the plans pertaining to sequence of operations and seasonal limitations. After evaluation by the Owner, the network will be returned to the Contractor either approved or with recommended changes. The Contractor shall resubmit three copies of the finalized network schedule within three weeks after receipt of the preliminary schedule returned by the Owner.

In the event of a major change in scope (Change Order), a time extension, or the Contractor's failure to comply with the approved schedule, the Contractor shall change the network schedule so as to show the current mode of operation, prior to the next payment.

C. Progress Reports:

Each month the Contractor shall submit a report (three copies) reflecting actual progress of the work. These progress reports shall be made for any project in which either a bar-graph schedule or network schedule is utilized. The reports shall show the percent complete for the total contract and for each line item activity listed on the bar-graph schedule or network schedule. The percentage figures shall be based on the monetary value of the work completed. These percentage figures shall be used by the Contractor in preparing his monthly estimate for partial payment.

The first report shall cover the work completed from the beginning of the project until the end of the first full month after the Notice to Proceed is issued. Subsequent reports shall show the total percent complete from the beginning of the work to the end of the month for which the report is prepared. All reports shall be submitted within seven days after the end of the month, and shall be dated and signed by the Contractor.

D. Daily Reports:

At the beginning of each workday the Contractor shall submit by no later than 10:00 A.M., a daily report indicating construction activities and progress of the work for the previous day. The report shall state the line item number, item description, and quantities of each installed or constructed that day. In addition, the report shall include as a minimum, the following:

1. Weather, including the temperature, sky condition, precipitation,
2. Important discussions with the Owner or Subcontractors,
3. Visitors or Inspections,
4. Hours of work,
5. Length and cause of any delay,
6. Arrival/departure of major equipment.

SECTION 108.09 - DETERMINATION AND EXTENSION OF CONTRACT TIME LIMIT

No request for an extension of time will be considered that is based on any claim that the contract time limit as originally established was inadequate.

Weather shall be considered "unusually severe", only if a weather condition (or any combination of weather conditions) prevents the Contractor from working a number of work days during a calendar month, which number exceeds the number of work days listed below for that calendar month. Delays will only be allowed for the amount of lost work days in excess of the following:

January	8	July	4
February	8	August	3
March	8	September	3
April	6	October	3
May	4	November	4
June	4	December	6

In no way is the Contractor to interpret the allowed days per month to be cumulative.

The submittal evidence, for weather claim, shall include a copy of the project schedule, as required under Section 108.08, which is referenced along with daily reports to prove that the days claimed are in excess of the time allocated to the critical construction. Delays to construction events not on the critical path for completion will not be given Change Order adjustments to the schedule.

If the satisfactory fulfillment of the Contract with extensions and increases authorized in accordance with Sections 104.02 and 104.03 requires the performance of work in greater quantities than those specified in the Contract, the contract time limit will be increased according to one of two options selected at the discretion of the Owner; (1) the extra time allowances as agreed on and set forth in the extra work order that covers the additional work, or (2) the same ratio that the total cost of work actually performed shall bear to the total cost shown in the bid schedule. However, in no case will a time extension be granted unless the Contractor can substantiate the need for an extension of the contract time limit supported by a revised progress schedule.

During prosecution of the work, the Contractor shall identify the causes for any delays attributable to conditions he deems to be beyond his control and shall identify the particular construction operations affected and the significant dates that encompass the periods of delay. The timely submission to the Owner of such information is essential for the Owner to make an adequate evaluation of any subsequent claim received from the Contractor for an extension of the contract time limit.

A. Calendar Days

When the contract time limit is specified in calendar days, the time includes Sundays, holidays, and non-working days. When the Owner authorizes the suspension of work in whole or in part in accordance with Section 108.10 and such suspension is not attributable to any fault or negligence on the part of the Contractor, the contract time limit will be adjusted. The contract time limit may be adjusted on a day-for-day basis when the work is wholly suspended and on a prorated basis when the work is partially suspended.

To determine the number of calendar days chargeable to the contract time limit for work performed between the effective dates of a partial suspension order, the total dollar value of the Contract will be divided by the number of days in the contract time limit. The result shall be the dollar value of one day's work. The dollar value of all work actually performed during a partial suspension period will be divided by the monetary value of one day's work. The result, in days, will be charged against the contract time limit. In no case will the number of days charged be greater than the total number of calendar days between the effective dates of a partial suspension order. In determining the dollar value of work actually performed during a partial suspension period, the dollar value of adjustments made for work performed prior to the issuance of a partial suspension order and the dollar value of mobilization and stockpiled materials during the period will be excluded.

B. Fixed Date

When the contract time limit is specified as a fixed date, the Contractor shall take into consideration normal conditions considered unfavorable for the prosecution of the work and shall place sufficient workers and equipment on the project to complete the work in accordance with the contract time limit.

The Owner will give consideration for extension of time when a delay occurs due to unforeseen causes beyond the control of and without the fault or negligence of the Contractor. However, consideration will not be given to extensions of time attributable to weather conditions or conditions resulting from weather.

The Contractor will have a maximum of 20 calendar days from the occurrence of an event he feels justifies an extension of time to notify the Owner in writing. The Contractor will have a maximum of 45 calendar days from the occurrence of an event he feels justifies an extension of time to substantiate the claim, including submittal of a revised progress schedule indicating the total impact of the event on the project, or else the claim is automatically denied.

SECTION 108.10 - SUSPENSION OF WORK ORDERED BY THE OWNER

The Owner shall have the authority to suspend the work wholly or in part by written order for such period as he may deem necessary because of unsuitable weather, any condition considered by him to be unfavorable for the suitable prosecution of the work, or failure on the part of the Contractor to correct conditions unsafe for workers or the general public, to carry out orders given, or to perform any provisions of the Contract Documents. Extension of the contract time limit because of suspension orders will be determined in accordance with Section 108.09. When a suspension order is attributable to the fault or negligence of the Contractor, consideration will not be given to extension of the contract time limit.

SECTION 108.11 – SCHEDULE OF LIQUIDATED DAMAGES

TABLE I
Schedule of Liquidated Damages

Original Contract Amount

From More Than	To and Including	Daily Charge
$0	$50,000	$120
$50,000	$100,000	$250
$100,000	$500,000	$450
$500,000	$1,000,000	$1,050
$1,000,000	$2,000,000	$1,400
$2,000,000	$4,000,000	$1,600
$4,000,000	$8,000,000	$1,800
$8,000,000+		$2,800

SECTION 109 - MEASUREMENT AND PAYMENT

SECTION 109.01 - MEASUREMENT OF QUANTITIES

Work specified in the Contract Documents will be measured by the Owner according to U.S. Standard Measure. The methods of measurement and computations to be used to determine quantities of material furnished and work performed will be those generally recognized as conforming to good engineering practice.

Longitudinal measurements for surface computations will be made horizontally, and transverse measurements will be the surface measure shown on the plans or ordered in writing by the Owner. Individual fixture areas of 9 square feet or less will not be deducted from surface areas measured for payment.

Structures will be measured according to neat lines shown on the plans.

Items that are measured by the linear foot will be measured parallel to the base or foundation upon which they are placed.

Allowance will not be made for surfaces placed over a greater area than shown on the plans or for any material moved from outside the area of the cross section and lines shown on the plans.

When standard manufactured items are specified and are identified by weights or dimensions, such identification will be considered nominal. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.

A. Measurement by Weight

Materials that are measured or proportioned by weight shall be weighed on accurate scales. When material is paid for on a tonnage basis, personnel performing the weighing shall be bonded to the Commonwealth of Virginia in the amount of $10,000 for the faithful observance and performance of the duties of the weigh person required herein. No payment will be made for materials delivered in excess of the legal load limits estimated for each truck.

The Contractor shall have the weigh person perform the following:

1. Post and furnish a weekly tare weight of each truck used and keep a record of them for 12 months.

2. Furnish a signed weigh ticket for each load that shows the date, truck number, load number, plant name, size and type of material, project, schedule or purchase order number, and the weights specified herein.

3. Maintain sufficient documentation so that the accumulative tonnage and distribution of each lot of material, by contract, can be readily identified.

4. Submit by the end of the next working day a summary of the number of loads and total weights for each type of material by contract.

Trucks used to haul material being paid for by weight shall display the truck number and legal gross and legal net weight limits. These markings shall be permanently stenciled on each side of the truck and plainly visible to the weigh person from the normal position at the scales.

The truck tare to be used in the weighing operation shall be the weight of the empty truck determined with full tank(s) of fuel and the operator seated in the cab. The tare weight of trucks shall be recorded to the nearest 20 pounds. At the option of the Contractor, a new tare may be determined for each load. When a new tare is obtained for each load, the requirement for full tank(s) of fuel will be waived.

Net rail shipment weights may be used for pay quantities when evidenced by railroad bills of lading. However, such weights will not be accepted for pay quantities of materials that subsequently pass through a stationary mixing plant.

Scales shall conform to the requirements for accuracy and sensitivity specified in the NIST's Handbook No. 44 for Specification Tolerances and Requirements for Commercial and Weighing Devices. Scales shall be approved and sealed by the Weights and Measures Regulatory Section of the Virginia Department of Agriculture and Consumer Services, or other approved agencies, within the previous 12 months and upon being moved. Hopper and truck scales shall be serviced and tested by a scale service representative at least once every six months. Truck scales shall be checked with at least 20,000 pounds of test weights. This test shall be done prior to the annual check by the Department of Agriculture and Consumer Services.

Copies of scale test reports shall be maintained on file at the scale location for at least 18 months.

The quantity of materials paid for on a tonnage basis shall be determined on scales equipped with an automatic printer. Truck scale printers shall print the net weight and either the gross or tare weight of each load. Hopper scale printers shall conform to the requirements of Section 211.12 and shall print the net weight of each load. The weigh ticket shall also show the legal gross weight for material weighed on truck scales and the legal net weight for material weighed on hopper scales.

If the automatic printer becomes inoperative, the weighing operation may continue for 48 hours provided satisfactory visual verification of weights can be made. The written permission of the Owner will be required for the operation of scales after 48 hours.

If significant discrepancies are discovered in the printed weight, the ultimate weight for payment will be calculated on volume measurements of the materials in place at unit weights determined by the Owner or by other methods deemed appropriate to protect the interests of the Owner.

B. Measurement by Cubic Yard

Material that is measured by the cubic yard, loose measurement or vehicular measurement, shall be hauled in approved vehicles and measured therein at the point of delivery. Material measured in vehicles, except stream bed gravel, will be allowed at the rate of 2/3 the volume of the vehicle. The full volume of the vehicle will be allowed for stream bed gravel. Such vehicles may be of any size or type acceptable of the Owner provided the body is of such shape that the actual contents can be readily and accurately determined. Unless all approved vehicles are of uniform capacity, each vehicle shall bear a plainly legible identification mark indicating the specific approved capacity. Each vehicle shall be loaded to at least its water level capacity, and each load shall be leveled when the vehicle arrives at the point of delivery.

When approved by the Owner in writing, material specified to be measured by the cubic yard may be weighed and such weights converted to cubic yards for payment purposes. Factors for conversion from weight to volume measurement will be determined by the Owner and shall be agreed to by the Contractor before they are used.

C. Measurement by Lump Sum

When used as an item of payment, the term lump sum will mean full payment for completion of work described in the Contract Documents. When a complete structure or structural unit (in effect, lump sum work) is specified as the unit of measurement, the unit will be constructed to include necessary fittings and accessories. Items that are to be measured as complete units will be counted by the Owner in the presence of a representative of the Contractor.

D. Specific Items

1. Concrete will be measured and computed by dividing the work into simple geometrical figures and adding their volumes.

2. Excavation, embankment, and borrow: In computing volumes of excavation, embankment, and borrow, methods having general acceptance in the engineering profession will be used. When the measurement is based on the cross-sectional area, the average end area method will be used.

3. Asphalt will be measured by the gallon, volumetric measurement, based on a temperature of 60 degrees Fahrenheit using the following correction factors:

a. 0.00035 per degree Fahrenheit for petroleum oils having a specific gravity 60/60 degree Fahrenheit above 0.966

b. 0.00040 per degree Fahrenheit for petroleum oils having a specific gravity 60/60 degree Fahrenheit between 0.850 and 0.966

c. 0.00025 per degree Fahrenheit for emulsified asphalt.

Unless volume correction tables are available, the following formula shall be used in computing the volume of asphalt at temperature other than 60 degree Fahrenheit:

$$V1 = V/K(T-60) + 1$$

where V = volume of asphalt to be corrected; V1 - volume of asphalt at 60 degree Fahrenheit; K = correction factor (coefficient of expansion); and T = temperature in degrees Fahrenheit of the asphalt to be corrected.

When asphalt is delivered by weight, the volume at 60 degree Fahrenheit will be determined by dividing the net weight by the weight per gallon at 60 degree Fahrenheit.

When specified in the Contract Documents, asphalt will be measured by weight. Net certified scale weights, or weights based on certified volumes in the case of rail shipments, will be used as a basis of measurement, subject to correction when asphalt has been lost from the car or the distributor, disposed of, or otherwise not incorporated in the work.

When asphalt is shipped by truck or transport, net certified weights or volumes subjected to correction for loss or foaming may be used to compute quantities.

Only the quantity of asphalt actually placed in the work and accepted will be considered in determining the amount due the Contractor.

4. Timber will be measured in units of 1,000 foot-board-measure actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.

5. Equipment rental will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the project or source of supply and the project except when another method of measurement is specified.

SECTION 109.02 - PLAN QUANTITIES

When specified in the Contract Documents, items will be measured and paid for on the basis of plan quantities. The quantities allowed for compensation will be those shown on the plans with deductions from or authorized additions to such quantities resulting from deviations from the plans. In the case of excavation, only excavation within the cross-section prism will be paid for on a plan quantity basis.

If the Contractor believes that any plan quantity is incorrect, he may solicit, at his own expense, the aid of a certified Professional Engineer to check the quantity or he may ask the Owner in writing to check computations of the quantity. Written requests for a quantity check by the Owner shall be accompanied by calculations, drawings, or other evidence indicating why the plan quantity is believed to be in error. If any item of the Contract Documents is found to be in error, payment will be made in accordance with the corrected plan quantity.

If the Owner determines during construction that there is an error in the plan quantity or that conditions vary from those anticipated in the design to the extent that an actual measurement of a plan quantity item is warranted, the Owner will make such measurement. Payment will then be based on the measured quantity in lieu of the plan quantity.

SECTION 109.03 - SCOPE OF PAYMENT

Payments to the Contractor will be made for the quantities of contract items performed in accordance with the Contract Documents.

The Contractor shall accept the compensation provided for in the Contract Documents as full payment for the following:

A. furnishing of all materials, labor, tools, equipment, and incidentals necessary to complete the work;

B. performance of all work contemplated under the Contract Documents;

C. all loss or damage arising from the nature of the work, action of the elements, or any other unforeseen difficulties that may be encountered during prosecution of the work and until its final acceptance;

D. all costs associated with risks of every description connected with the prosecution of the work;

E. all expenses incurred in consequence of the suspension of the work as herein authorized;

F. all costs associated with any infringement of patent, trademark, or copyright;

G. the completion of the work in accordance with the Contract Documents;

H. all testing necessary for the proper operation of the system.

If the payment specifications relating to any unit price in the Contract Documents require that the unit price cover and be considered compensation for certain work or material essential to the item, the work or material will not be measured or paid for under any other item except as provided in Section 106.05.

The payment of any partial estimate or any retained percentage prior to final acceptance of the project as provided for in Section 105.15 shall in no way affect the obligation of the Contractor to repair or renew any defective parts of the construction or to be responsible for all attributable to such defects.

SECTION 109.04 - COMPENSATION FOR ALTERED QUANTITIES

Alterations of plans or character of work involving extra work orders as provided for in Section 104.02 will be paid for in accordance with Section 104.02. If prices cannot be agreed on, the Contractor shall proceed with the performance of the work in accordance with the provisions of Section 109.05.

SECTION 109.05 - EXTRA WORK

Extra work performed in accordance with the requirements and provisions of Section 104.03 will be paid for as follows:

A. Change Order

A Change Order is a written order to the Contractor signed by the Owner, issued after execution of the Contract, authorizing a change in the Work or an adjustment in the Contract quantities or the Contract Time. The Contract quantities, Contract Time and change in work may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract quantities or the Contract Time.

B. Formal Notification

A memo is required when changes occur in the estimated quantities of a unit price contract after contract award; or when time does not permit preparation and execution of a contract change order prior to performance of the work; or when notice is necessary to alert the City Purchasing Agent of significant changes or incidentals not requiring a contract change order. All such work shall be performed under the applicable provisions of the Contract Documents.

C. Unilateral Change Order

If none of the methods set forth in paragraphs (a) or (b) above is mutually agreed upon, the Contractor, provided he receives a written order signed by the Owner, shall promptly proceed with the Work involved. The cost of such Work shall be determined by the Owner.

D. Itemization of Costs

In order to facilitate verifying quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, material and equipment. In no case will a change involving over $100.00 be approved without such itemization. If the net value of change results in a credit, the credit given shall be the total cost including all items of labor, material, equipment, overhead and profit.

E. All Change Orders, Formal Notifications and/or Unilateral Change Orders shall become part of the Contract Documents.

SECTION 109.06 - ELIMINATED ITEMS

If any item in the Contract is determined to be unnecessary for the proper completion of the work contracted, the Owner may, upon written notice to the Contractor, eliminate such item from the Contract. Payment will not be made for such item except that the Contractor will be compensated for the actual cost of any work performed for the installation of such item and the net cost of materials purchased, including freight and tax costs, as evidence by invoice. No additional compensation will be made for overhead or anticipated profit.

SECTION 109.07 - PARTIAL PAYMENT

Partial payments will be made once each month covering work performed in accordance with the Contract Documents, based on estimates prepared by the Contractor, provided, however, that no estimate will be certified or payment made where the net amount receivable by the Contractor is less than $500.00. The value of work accomplished on items measured on a unit basis will be determined on a prorated basis. The Owner will review and approve the partial estimate with the Contractor's representative prior to payment. If the Owner determines that the Contractor has been overpaid, all further partial payments may be credited against such overpayment.

The monthly estimate, prepared and submitted by the Contractor on forms provided by the Owner shall include the percentage of completion, the projected percentage of completion (based on approved progress schedule), the contract time and the amount of contract time expended to date.

When the actual percentage of completion is more than five (5%) percent less than the projected percentage of completion (based on the approved progress schedule), the Contractor shall submit, in writing, the reason or reasons for the delay and what action will be taken to get the project back on schedule. No application for payment will be accepted unless this information has been submitted.

SECTION 109.08 - PAYMENT FOR MATERIAL ON HAND

When requested in writing by the Contractor, payment allowances may be made for material secured for use on the project in accordance with the following terms and conditions:

A. All material for which payment allowance is requested shall be stored in an approved manner and in areas where damage is not likely to occur. If any of the stored materials are lost or become damaged in any manner, the Contractor shall be responsible for repairing or replacement of such damaged materials. If payment allowance has been made prior to such damage or loss, the amount so allowed, or an apportioned part thereof,

will be deducted from the next progress estimate payment and withheld until satisfactory repairs or replacement have been made.

When it is determined impractical to store materials within limits of the project, the Owner may approve the storage of materials on private property or, for structural members, on the manufacturer's of fabricator's yard. Requests for payment allowance for such material stored outside the limits of the project shall be accompanied by a release from the property owner and/or tenant of such property or yard agreeing to permit the removal of the materials from the property without costs to the Owner.

B. In the event the Contractor requests payment allowance for properly stored material, a certified and itemized inventory statement shall be submitted to the Owner by the Contractor no earlier than five days and no later than two days prior to the progress estimate date. The inventory statement shall be accompanied by invoices or other documents which will verify the material's cost. Following the initial submission, the Contractor shall submit to the Owner a monthly certified up-date of the itemized inventory statement within the aforementioned time frame. The update inventory statement shall show additional materials received and stored with invoices or other documents, and list all materials removed from storage since the last certified inventory statement with appropriate cost data reflecting the change in the inventory. In the event the Contractor fails to submit the monthly certified up-date of the itemized inventory statement within the aforementioned time frame, the Owner will deduct the full amount of the previous statement from the progress estimate.

SECTION 109.09 FINAL PAYMENT

When final inspection and final acceptance have been duly made by the Owner the Contractor will prepare the final statement of the quantities of the various classes of work performed.

Upon receipt of the Contractor's final statement, the Owner shall respond within 90 days either by making payment or by indicating in writing to the Contractor their disagreement with the quantities or prices set forth in the final statement.

All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

SECTION 109.10 WARRANTY/GUARANTEE

If any of the work is discovered to be not in accordance with the requirements of the Contract Documents within one year after final acceptance, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so.

If the Contractor fails to correct nonconforming work within a reasonable time, the Owner may declare the Contractor to be in default under the Contract, and exercise its rights as provided in the Contract Performance Bond.

City of Virginia Beach - Purchasing Department
SWaM-certified Subcontracting Participation Plan

Form CVAB - E2

Project Name: _____

Bid Number: _____

Prime Contractor: _____

Address: _____

City, State, Zip: _____

Contact Telephone: _____

Contact Email: _____

Intent to utilize subcontractors **YES** **NO** (indicate selection by circling correct option)

Total Bid Amount

Total Subcontracting Amount

**Total SWaM-certified Subcontracting Amount

**must be equal to or greater than 50% of total subcontracting amount

********Participation Plan and/or Good Faith Efforts MUST be submitted with the bid********

SWaM-certified firm	Certification Number	Status (M, S, or W)	Scope of Work to be Performed	Estimated Dollar Amount	DBE certified Y/N	MBCoord Approval	Verified
						(FOR OFFICE USE ONLY)	

IMPORTANT: THIS PARTICIPATION PLAN MUST BE SUBMITTED WITH YOUR SEALED BID, NO EXCEPTIONS

By signing below, you attest that the above information is true and accurate to the best of your knowledge, in addition you certify your intent to fully engage each SWaM-certified firm listed.

Authorized Representative (Prime) Name **Print** _____ **Title** _____ **Authorized Representative (Prime)** **Signature** _____ **Date** _____

Prime Contractor Workforce Composition Form

Prime Contractor: _____

Submittal Date: _____

	# Employees	% Employees	% Managers	% Supervisors	% Professionals	% Non-Professionals
Woman						
Minority						
Other						
Total						

Descriptions

Manager:
Responsible for directing and controlling the work and staff of a business, or of a department within it.

Supervisor:
Oversees and guides the work or activities of a group of other employees.

Professional:

Requires extensive education in their field (undergraduate degree or higher) or a specialized certification from an accredited agency.

Non-Professional:
Not in one of the above categories.

City of Virginia Beach - Purchasing Department
Monthly SWaM-certified Subcontractor Payment Data Sheet

Form CVAB - E

Project Name: _____

Bid Number: _____

Prime Contractor: _____

Total Bid Amount

Total Subcontracting Amount

**Total SWaM-certified Subcontracting Amount

**must be equal to or greater than 50% of total subcontracting amount

PAYMENT DATA SHEET - CITY FORM E

SWaM-certified firm	Certification Number	Status (M, S, or W)	Scope of Work Performed	Contact Information for SWaM-certified Firm (name and telephone number)	Amount Paid this month	Total Amount Paid (YTD)

IMPORTANT: THIS PARTICIPATION PLAN MUST BE SUBMITTED MONTHLY DIRECTLY TO THE MINORITY BUSINESS COORDINATOR

By signing below, you attest that the above information is true and accurate to the best of your knowledge, in addition you certify your intent to fully engage each SWaM-certified firm listed.

Authorized Representative (Prime) Name **Print** | **Title** | **Authorized Representative (Prime) Signature** | **Date**

City of Virginia Beach – Mandatory Specification
Contractor Performance Evaluation

Section I – General Project Information – Must be completed in its entirety.

<table>
<tr><td>Name of Firm:

Name of Prime:

Name of Project Manager:

Name of Superintendent(s):</td><td colspan="2">Prime Phone:

Project Manager Phone:

Superintendent(s) Phone:</td></tr>
<tr><td>Project Manager Department/Title:</td><td colspan="2">Date:</td></tr>
<tr><td rowspan="2"></td><td colspan="2">Contract Cost Including Change Order: $</td></tr>
<tr><td>Initial Award:

Change Order(s) Amt:

Final Contract Amt:</td><td></td></tr>
<tr><td>Project Title & Number:</td><td colspan="2">Contract Start/End Dates:</td></tr>
<tr><td colspan="3">Description of Project: [Design] [Construction] [Other (specify _____)]</td></tr>
</table>

Section II – Project Performance

Please rate this contractor's performance in each of the following areas. If you need additional space, attach additional sheets. If you rate the contractor below "satisfactory" in any area, please provide detailed information to explain the rating assigned. You are not restricted to using the numerical values (points) shown and may scale in between the points shown.

1. Quality of Workmanship/Project Management (0-25 points)

Rate the quality of this contractor's workmanship. Were there quality-related or workmanship problems? Was the contractor responsive to remedial work required? If so or if not, provide specific examples.

_____

_____

_____

_____

Satisfactory

0	20	25

Score: _____

2. Scheduling (0-15 points)

Rate this contractor's performance with regard to adhering to contract schedules. Did this contractor meet the contract schedule or the schedule as revised by approved change orders? If not, was the delay attributable to this contractor? If so, provide specific details/examples.

_____

_____

_____

_____

Satisfactory

0	12	15

Score: _____

3. Woman and Minority Subcontractor Utilization (0-15 points)

Rate this contractor's effort and success in utilizing woman and minority subcontractors. Did the contractor submit a credible plan? Did the contractor meet or exceed the plan?

_____

_____

_____

_____

Satisfactory

0	10	15

Score: _____

4. Environmental Compliance (0-15 points)

Did the contractor comply with local, state and federal environmental standards, requirements, laws, statutes, regulations or the law of nuisance in the performance of this contract?

_____

_____

_____

_____

Satisfactory

0	12	15

Score: _____

5. General Performance of On-Site Supervisory Personnel (0-15 points)

Rate the general performance of this contractor's on-site supervisory personnel. Did they have the knowledge, management skills and experience to run a project of this size and scope? If not, provide specific examples.

_____

_____

_____

_____

Satisfactory

●	●	●
0	**12**	**15**

Score: _____

6. Subcontractor Management (0-10 points)

Rate this contractor's ability, effort and success in managing and coordinating subcontractors. Was this contractor able to effectively resolve problems? If not, provide specific examples. NOTE: If no subcontractor(s) were utilized, then score this as N/A.

_____

_____

_____

_____

Satisfactory

●	●	●
0	**7**	**10**

Score: _____

7. Safety and Housekeeping Procedures (0-10 points)

Rate this contractor's safety and housekeeping procedures on this project. Were there any OSHA violations or serious safety accidents or notification of violations? If so, provide specific examples.

_____

_____

_____

_____

Satisfactory

●	●	●
0	**7**	**10**

Score: _____

8. Change Order(s) (0-10 points)

Were the contractor's change orders reasonable and equitable? Did the contractor attempt to unreasonably claim change orders or extras? If so, provide specific examples. NOTE: If no change orders were made, then score this as N/A.

_____

_____

_____

_____

Satisfactory

0 ● ——— **7** ● ——— **10** ●

Score: _____

9. Working Relationships (0-10 points)

Rate this contractor's working relationships with other parties (i.e., awarding authority, designer, subcontractors, government inspectors, the public, etc.). Did this contractor interact with other parties in a professional manner? If not, give specific examples.

_____

_____

_____

_____

Satisfactory

0 ● ——— **7** ● ——— **10** ●

Score: _____

10. Documentation and Submittals (0-10 points)

Rate this contractor's performance in completing and submitting required documentation (i.e., change orders, electronic submittals, drawings, invoices, payrolls, workforce reports, warranty, final as-builts, etc.). Did the contractor submit the required paperwork promptly and in proper form? If not, give specific examples.

_____

_____

_____

_____

Satisfactory

0 ● 7 ● 10 ●

Score: _____

Please add up all points of the 10 evaluated performance areas from the preceding pages and enter the total score below.

Total Score: ____

Possible Max Score: __135 (If all areas rated) __

Satisfactory Score: __75%

Contractors Score _____ / _____ %

Overview/Explanation of Score:

_____

_____

_____

_____

_____

_____

_____

_____

Section III: Legal and Administrative Proceedings

Are you aware of any legal or administrative proceedings, invoked bonds, assessed damages, liquidated damages, demands for direct payment, payment bond claims, contract failures, contract terminations or penalties involving this contractor on this contract? What is the status of any pending litigation? What was the final outcome of any completed litigation? What are the dollar amounts of assessed damages or penalties?

Comments:
_____
_____
_____
_____

Section IV: Evaluation Certification

I certify that the information contained in this evaluation form represents, to the best of my knowledge, a true analysis of this contractor's performance record on this contract.

I also certify that I have no ties with this contractor either through a business or family relationship.

I have mailed a copy of this completed evaluation form to the contractor on _____.

Enter Date

(Public Awarding Authorities must mail a copy of this completed evaluation form to the contractor.)

Signatures:

_____	_____	_____
SignaturE	Name and Title of Inspector	Date
_____	_____	_____
Signature	Name of Project Manager	Date
_____	_____	_____
Signature	Division Manager	Date
_____	_____	_____
Signature	Department Director	Date
_____	_____	_____
Signature	Purchasing Agent or Designee	Date